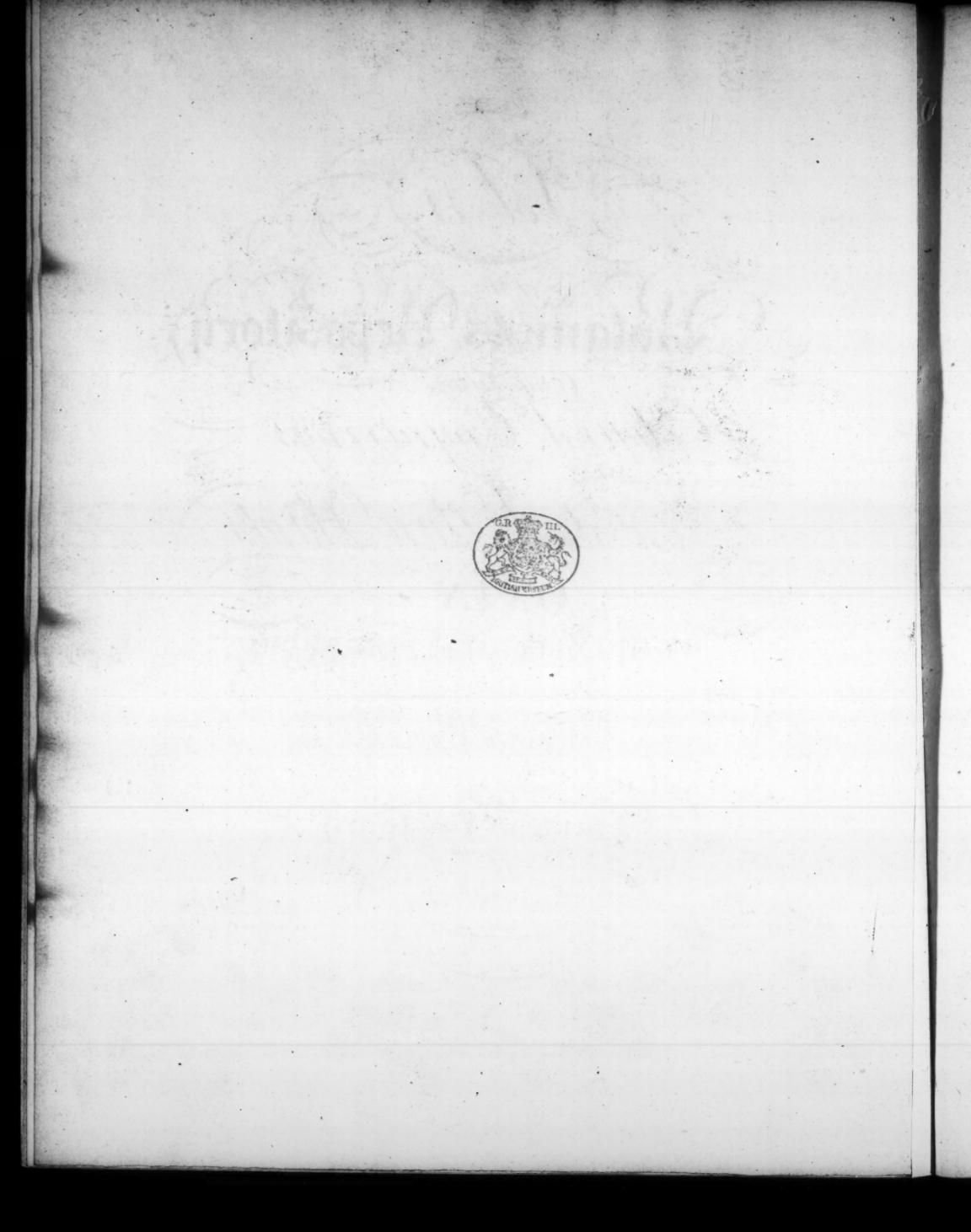
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DAIPH NEED PONTICA.

Pontic Spill ye-Lancel.

CLASS VIII TAKBER T

OCHANDRIA MOROGINEA Ego Chica on Baltan

ARTOMETER CHARLES

Coderia menepani dinakingkanganaki da bas cylindracas, ingelindrasi hako kun guer, Limberg, ambigigi 'Insania eksib kautis, pingis, pupudbin

Stantas Mildecuta ado, previa tero idente, alterna diferinta. Carabette leprotoneta.

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PLATE LXXIII.

DAPHNE PONTICA.

Pontic Spurge-Laurel.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

GENERIC CHARACTER.

CALYX, nullus.

COROLLA monopetala, infundibuliformis. Tubus cylindraceus, imperforatus, limbo longior. Limbus quadrifidus; laciniis ovatis, acutis, planis, patentibus.

STAMINA. Filamenta octo, brevia, tubo inferta; alterna inferiora. Antheræ fubrotundæ, erecæ, biloculares.

PISTILLUM. Germen ovatum. Stylus brevissimus. Stigma capitatum, depresso-planum. Pericarpium. Bacca subrotunda, unilocularis. Semen unicum, subrotundum, carnosum.

EMPALEMENT, none.

BLOSSOM one petal, funnel-shaped. Tube cylindrical, closed at the base, longer than the border. Border sour-cleft; segments egg-shaped, sharp, slat, and spreading.

CHIVES. Eight fliort threads, fixed to the tube; four alternately lower than the others. Tips roundish, upright, with two cells.

POINTAL. Seed-bud egg-shaped. Shaft very short. Summit a low, smooth knob.

SEED-VESSEL. A roundish berry, of one cell. SEED, single, roundish, and sleshy.

SPECIFIC CHARACTER.

Daphne, pedunculus axillaribus, bifloris; foliis obovatis, nitidis.

Spurge-laurel, the fruit stalks growing from the base of the leaves, with two slowers each; leaves inversely egg-shaped, and shining.

REFERENCE TO THE PLATE.

- 1. A Flower cut open, to flew the fituation of the Chives.
- 2. The Pointal, (natural fize).
- 3. A ripe Seed.

Tournefort in his Voyage to the Levant, Vol. III. has described this plant under the name of, Thymelæa Pontica Citrei foliis; Dr. P. Pallas in his Flora Rossica, has likewise figured and described it, under the title it bears in the Sp. Plan. p. 511; from both of whom we learn, that it is a native of the coast of the Black Sea, and therefore perfectly hardy, at least sufficiently so to endure our climate. It is the handsomest in foliage of any species of the genus, having, like most of them, fragrant flowers; which begin to shew themselves with the first budding of the plant in spring, about the first week in March. Like our common Spurge-laurel it delights in shade, making a pretty evergreen shrub, about two feet in height; and grows best in a light loamy soil. Although this plant has been long known by name, it had not been seen in England till 1795, a year subsequent to its being sent in seeds to Messrs. Lee and Kennedy, Hammersmith. It slowered for the first time here, in 1798; but our drawing was not made till this year, about the middle of April. It is propagated by the seed, or cuttings.



Daphne Pontica.

Sit 'sy H. Andrews Nov. 1. 1799

PLATE LXXIV.

PERSOONIA LANCEOLATA.

Lance-shaped leaved Persoonia.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

GENERIC CHARACTER.

CALYX, nullus.

COROLLA. Petala quatuor, bafin versus staminifera, reflexa, apice incrassata.

Nectariæ. Glandulæ quatuor globofæ, ad basin germinis.

STAMINA. Filamenta quatuor brevia, fingula ex finguli petali medio enata. Antheræ lineares, conniventes, demum reflexæ.

PISTILLUM. Germen superum, ovatum. Stylus subulatus, glaber, persistens. Stigma obtusum, declinatum.

Pericarpium. Drupa fubrotunda, monosperma.

SEMEN. Nux offea, fubrotunda, compressa.

EMPALEMENT, none.

BLOSSOM. Four petals, supporting the chives near the bottom, bent back, and thickened at the point.

Honey-cups. Four round glands at the base of the seed-bud.

CHIVES. Four fhort threads, one growing out of each petal about the middle. Tips linear, and approaching each other, then reflexed.

Pointal. Seed-bud egg-shaped, and above. Shaft awl-shaped, smooth, and remaining. Summit blunt, and bent downward.

SEED-VESSEL. A pulpy berry, roundish, with one feed.

SEED. A hard, roundish nut, flattened.

SPECIFIC CHARACTER.

Perfoonia foliis lanceolatis, acutis, enerviis, utrinque glabris; petiolis tortis; floribus axillaribus, flavis.

Persoonia with lance-shaped leaves, sharp pointed, without nerves, and smooth on both sides; foot-stalks twisted; the slowers grow at the lower part of the leaves, close to the stem, and yellow.

REFERENCE TO THE PLATE.

- 1. A Bloffom.
- 2. One division of the Blossom with its Chive.
- 3. The Pointal (natural fize).
- 4. The fame (magnified).
- 5. The Receptacle, with the Honey-cups (magnified).
- 6. A Berry cut in two, the Seed taken out.
- 7. A ripe Seed.

Every step we make in the examen of plants, from that endless source for botanical research, New Holland; nature almost as constantly, presents us with a perfectly new face; such is the object of our present consideration. Dr. Smith, P. L. S. in the Linnæan Transactions, Vol. IIII. p. 215, confidering a new Genus as necessary for this tribe of plants, has named it in honour of C. H. Persoon, much noted for his works on the fungi. This is a handsome, spreading greenhouse plant, growing about five feet high, and covering itself with deep yellow blossoms. It is propagated by cuttings, or seeds, which come to maturity with us, and are produced in great numbers. J. Willson, Esq. of Islington, raised this species from seeds about the year 1791; from a specimen in whose collection our figure was taken, this year in July, and where it flowered for the first time last year, in the month of August, and is still in bloom, although many seeds are already persected, from the flowers of last year.



Sersoonia lanceolata

PLATE LXXV.

PHYSALIS PROSTRATA.

Trailing Winter-cherry.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CLAYX. Perianthium monophyllum, ventricofum, femi quinquefidum, pentagonum; laciniis acuminatis; perfistens.

COROLLA. Monopetala, rotata. Tubus brevissimus. Limbus semiquinquesidus, magnus, plicatus.

STAMINA. Filamenta quinque, fubulata, minima, conniventia. Antheræ erectæ, conniventes.

PISTILLUM. Germen subrotundum. Stylus filiformis, staminibus fere longior. Stigma obtusum.

Pericarpium. Bacca fub-globosa, bilocularis, intra calycem maximum, inflatum, claufum, pentagonum.

Semina plurima, reniformia, compressa.

EMPALEMENT. Cup one leaf, bellied, half fivecleft, and five-fided; the fegments are tapered; permanent.

Blossom, one petal, wheel-shaped. Tube very short. Border half five-cleft, large, and plaited.

CHIVES. Five threads, awl-shaped, very small, and approaching. Tips upright, and approaching.

Pointal. Seed-bud roundish. Shaft threadshaped, hardly longer than the chives. Summit blunt.

SEED-VESSEL. A roundish berry, two-celled, within a large, swelled, close-mouthed, five-fided cup.

SEEDS many, kidney-shaped, and flat.

SPECIFIC CHARACTER.

Phyfalis, ramofissima, prostrata, hispida; foliis subcarnosis; corollis cæruleis.

Winter Cherry, very branching, trailing, and hairy; leaves nearly fleshy; blossoms blue.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. A Flower cut open, with the Chives attached.
- 3. The Pointal (natural fize).
- 4. A ripe Seed-vessel.

This beautiful species of Physalis, as a tender annual, should be sown early in March, on a strong hotbed; and kept, when potted, in the greenhouse, being impatient of cold or wet, and perishes if exposed to either. It is a native of Peru, South America, and has been figured by Professor Jacquin in his Ic. Rar. 1. t. 38; likewise by Mons. l'Heritier in his Stirp. Nov. p. 43. t. 22; and was first transmitted to England in the year 1782, by Mons. Thoin, from France. Although it has been cultivated here some years, it is but little known, owing to its great delicacy when young, being very liable to damp off in the hotbed.



PLATE LXXVI.

PROTEA PINIFOLIA.

Pine-leaved Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida, seu 4-petala. Antheræ lineares, insertæ petalis infra apicem. Calyx proprius nullus. Sem. solitaria.

BLOSSOM four-cleft or of four petals. Tips linear, inferted into the petals below the ends. Cup. Proper, none. Seeds folitary. See PROTEA SPECIOSA. Plate XVII.

SPECIFIC CHARACTER.

Protea floribus fimplicibus, racemofo-spicatis, glabris; foliis filiformibus, sparsis, glabris.

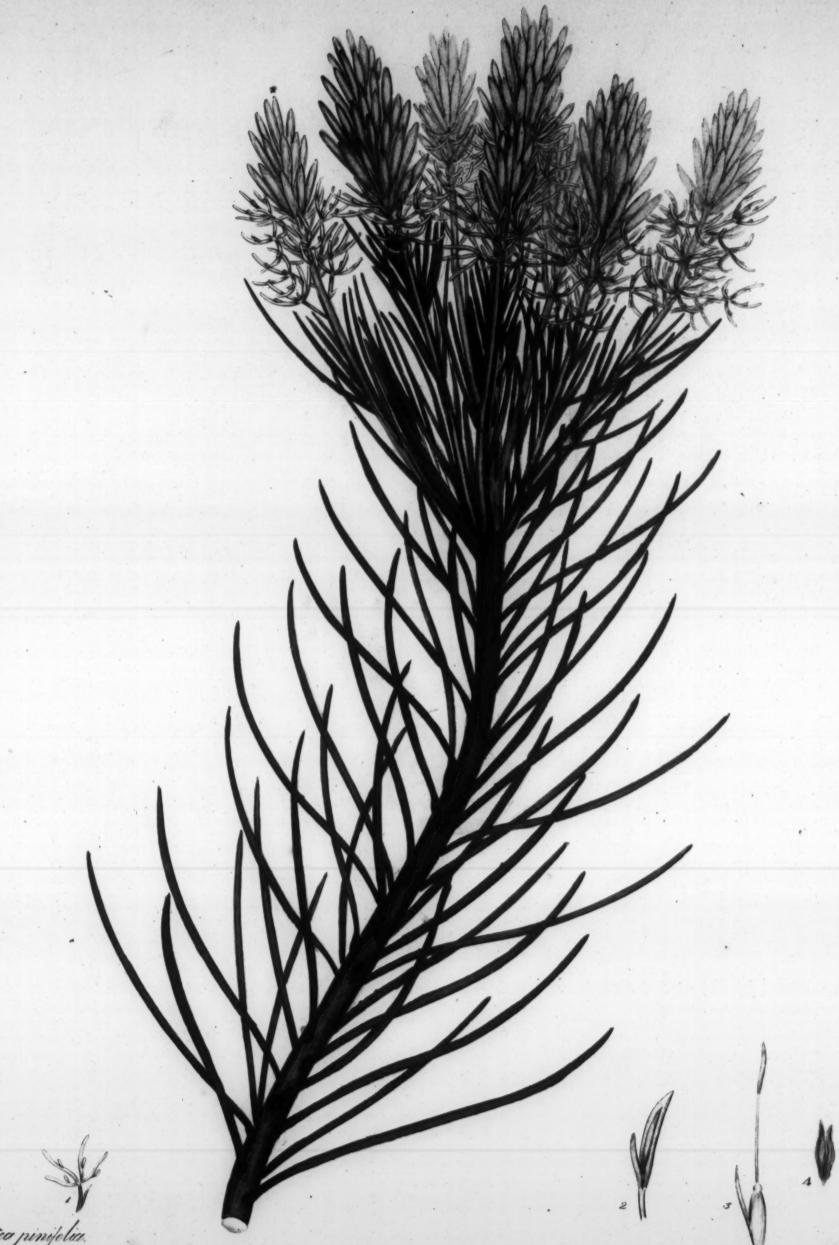
Protea with fimple flowers, growing in branching fpikes, and fmooth; leaves threadfhaped, fcattered, and fmooth.

REFERENCE TO THE PLATE.

- 1. A Bloffom complete.
- 2. One Petal of the Bloffom, (magnified), with its Chive attached.
- 3. The Pointal and Seed-bud, (magnified).
- 4. A ripe Seed.

The Pine-leaved Protea from the Cape of Good Hope, is rather a delicate plant; and is subject to be killed, if not kept in the driest, and warmest part of the greenhouse, being very susceptible of damps. It makes a very sine appearance when in bloom, growing to the height of two seet or more upright, and with sew branches; every part of the plant, (which is uncommon in this genus,) is quite smooth and shining. This species of Protea is an inhabitant of our gardens, since the year 1780; when it was first introduced by William Forsyth, Esq. of Kensington, but has been rarely seen to slower, as it is found but in sew collections; owing to the difficulty of propagating it, by the only possible method in this country, cuttings. The soil it approves most, as do most of the Proteas, is a light loam. The drawing was taken at the Hammersmith nursery, from a plant which slowered there in August this year.





Protea pinifolia.

PLATE LXXVII.

PERSOONIA LINEARIS.

Linear-leaved Persoonia.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX nullus. Petala 4, basin versus staminifera. Glandulæ 4, ad basin germinis. Stigma obtusum. Drupa monosperma. EMPALEMENT none. Petals four, supporting the chives near the bottom. Four glands at the base of the seed-bud. Summit blunt. A pulpy berry with one seed.

See Persoonia Lanceolata. Pl. LXXIV.

SPECIFIC CHARACTER.

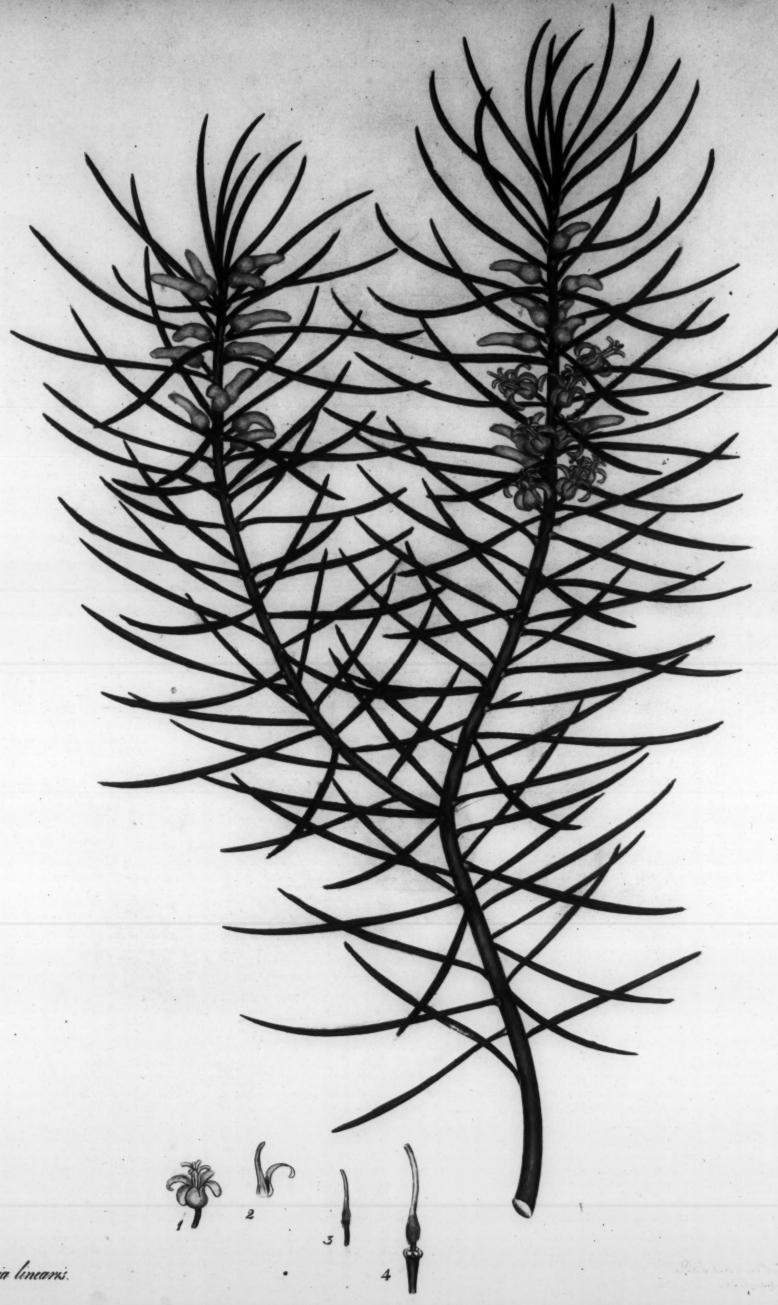
Persoonia foliis linearibus, sub-villosis; floribus flavis.

Persoonia with linear leaves, a little hairy; slowers yellow.

REFERENCE TO THE PLATE.

- 1. A flower complete.
- 2. One Petal of the flower, with its Chive, (magnified).
- 3. The Pointal, (natural fize).
- 4. The fame, (magnified).

THE Linear-leaved Persoonia, is indigenous to the same clime as the Lance-shaped leaved, given in our last number; grows to nearly the same height, and makes a handsome greenhouse plant, continuing to slower through the autumnal months; and producing good seeds. J. Robertson, Esq. of Stockwell, Surry, raised this species from seeds in the year 1794; with whom it flowered last year, for the first time in England; and for whose kind communication of a specimen in flower, (from which our drawing was made,) we beg our grateful acknowledgment. It is raised by seeds, or cuttings; and should be planted in peat earth.



Sersoonia linearis.

PLATE LXXVIII.

IXORA PAVETTA.

Sweet Ixora.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quadripartitum, minimum, erectum, perfiftens.

COROLLA monopetala, infundibuliformis. Tubus cylindraceus, longissimus, tenuis. Limbus quadripartitus, planus; laciniis ovatis.

STAMINA. Filamenta quatuor, brevissima, in divisuris corollæ. Antheræ oblongæ.

PISTILLUM. Germen fubrotundum, intra basin calycis. Stylus filiformis, longitudine tubi. Stigma bisidum.

Pericarpium. Bacca fubrotunda, bilocularis. Semina duo, hinc convexa, inde angulata.

EMPALEMENT. Cup with four divisions, very finall, upright, and remaining.

Blossom of one petal, funnel-shaped. Tube cylindrical, very long, and small. Border of four divisions and flat; the segments egg-shaped.

CHIVES. Four threads, very fhort, placed in the divisions of the blossom. Tips oblong.

POINTAL. Seed-bud roundish, in the bottom of the cup. Shaft thread-shaped, the length of the tube. Summit two-cleft.

SEED-VESSEL. A roundish berry, with two cells. SEEDs, two, hollow on the infide, and angled without.

SPECIFIC CHARACTER.

Ixora foliis obtufis, undulatis, petiolatis, floribus fasciculatis, odoratis, fordide luteis. Ixora with blunt, waved, leaves, having footftalks; flowers grow in bunches, are fweet fcented, and of a dirty yellow.

REFERENCE TO THE PLATE.

- 1. The Empalement, (magnified).
- 2. A Bloffom with the feed-bud attached, (natural fize).
- 3. The same with the Empalement, (magnified).
- 4. The Pointal, (natural fize).
- 5. The same, magnified.

To the Lady Dowager de Clifford are we indebted, for the introduction of this new species of Ixora, a native of the East Indies; her Ladyship having received it from thence, in the year 1796. It is a tender hot-house plant, growing to the height of a foot, or more, and very bushy; the bunches of flowers are very large, covering nearly the whole upper part of the plant, and are exceedingly fragrant. The blossoms begin to expand about the beginning of August, and continue to blow in succession, till the end of October. The only plant we have yet heard of, in England, is in her Ladyship's collection at Paddington; where it has flowered for the first time this year, and where our drawing was made. It is propagated like the other species of Ixora, by cuttings, and should be kept in rich earth.



PLATE LXXIX. CROWEA SALIGNA.

Willow-leaved Crowea.

CLASS X. ORDER I.

DE CANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquepartitum, laciniis ovatis.

COROLLA. Petala quinque, ovata, fessilia, erec-

STAMINA. Filamenta decem, plana, subulata, pilis intertextis connexa, pistillum obvolventia. Antheræ longitudinaliter filamentis e parte interiori adnatæ.

PISTILLUM. Germen superum. Stylus erectus, cylindricus, brevissimus, e basi germinis. Stigma capitatum.

Pericarpium. Capfulæ quinque, ovato-acuminatæ, extrorfum coalitæ, apicibus diftantes.

Semina folitaria, reniformia, glabra, arillata.

EMPALEMENT. Cup one leaf, with five divisions, the fegments egg-shaped.

BLOSSOM. Five petals, egg-shaped, fitting close in the cup, upright and spreading.

CHIVES. Ten threads, flat and awl-shaped, interwove together by hairs, covering the pointal. Tips growing longitudinally from the inner part of the threads.

POINTAL. Seed-bud above. Shaft upright, cylinder-shape, and very short, growing from the base of the seed-buds. Summit a knob.

SEED-VESSEL. Five capfules, pointedly-eggfhaped, joined on the outfide, and diffant at the ends.

SEEDs folitary, kidney-shape, smooth, and covered by an elastic coat.

SPECIFIC CHARACTER.

Crowea, foliis lanceolatis, utrinque glabris, integerrimis; floribus folitariis, axilaribus. Crowea, with lance-shaped leaves, smooth on both fides, quite entire; flowers grow solitary from the bottom of the leaves close to the stem.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. The Chives.
- 3. One Chive detached, natural fize.
- 4. The same magnified to shew the situation of the Tip.
- 5. The Pointal, natural fize.
- 6. The same magnified.
- 7. A ripe Seed.

THE number of handsome flowering plants from New Holland, already figured in the Botanist's Repository; leads us to hope, the first, and indeed most generally prevailing opinion, that the infignishcance of the flowers produced by the plants of that country, rendering them scarcely worth cultivation for ornament; must be nearly, if not quite done away: and we have reason to think, when farther explored, few countries will be able to stand a competition with it, for the fingularity, variety, or beauty of its vegetable productions. The Willow-leaved Crowea we confider as one amongst the many strong arguments, to favour our opinion; it is rather a delicate plant, and should be kept in a dry and warm part of the greenhouse, where it will flower from the month of July, till November; growing three feet high, if planted in light fandy peat; and is eafily propagated by cuttings. Although, this is the only species at present, in cultivation with us; there is little doubt from the number of handfome specimens of other species, which we have seen, in the different herbariums from Botany Bay; and from the character of the feeds, much refembling those of the Diosma, which are not subject to rapid decay; but we shall very soon be possessed of many more of this very beautiful Genus. Our drawing was made from the nursery at Hammersmith, where it was raised from feeds, in the year 1790. The generic title of this plant, is derived from the name of an English botanist at Norwich, Mr. James Crowe, F. L. S. see Linn. Tran. Vol. IV. page 222.





Grovea saligna.

PLATE LXXX. BUCHNERA FŒTIDA.

Stinking Buchnera.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquedentatum, fcabrum, perfiftens.

COROLLA monopetala; tubus longissimus, filiformis, arcuatus; limbus planus, quinquesidus, æqualis; laciniis duabus superioribus reslexis, tribus inferioribus cordatis, subæqualibus.

STAMINA. Filamenta quatuor, brevissima, in fauce corollæ, quorum duo superiora extra prominentia. Antheræ oblongæ, obtusæ.

PISTILLUM. Germen ovato-oblongum. Stylus filiformis, longitudine tubi. Stigma obtusum.

Pericarpium. Capfula ovato-oblonga, acuminata, tecta, bilocularis, apice bifarium dehifcens; diffepimentum contrarium.

Semina numerofa, angulata.

Receptaculum medio diffepimenti adnatum.

EMPALEMENT. Cup one leaf, five-toothed, rough, and remaining.

BLOSSOM one petal; tube very long, threadfhaped, and arched; border flat, five-cleft, equal; the two upper divisions reflexed, the three under ones heart-shaped, nearly equal.

CHIVES. Threads four, very fhort, in the mouth of the blossom, of which the two upper protrude without. Tips oblong, blunt.

POINTAL. Seed bud oblong egg-shaped. Shaft thread-shaped, the length of the tube. Summit blunt.

SEED-VESSEL. Capfule oblong-egg-shaped, tapered, covered, two cells, and splitting at the point in two; the partition opposite to the valves.

SEEDS numerous, and angular.

RECEPTACLE fixed to the middle of the partition.

SPECIFIC CHARACTER.

Buchnera, foliis laciniatis, oppositis, fœtidiffimis; flores umbellulati, terminales.

Buchnera, with leaves appearing torn, oppofite and very flinking; flowers terminate the branches in fmall umbels.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. A Flower cut open, to expose the fituation of the Chives.
- 3. The Pointal magnified.
- 4. A ripe Seed-vessel.

This species of Buchnera is an annual, and a native of the Cape of Good Hope; from whence, it was introduced to England in the year 1795, by Messrs. Lee and Kennedy. It should be raised with other tender annuals in spring, and kept, either to ornament the greenhouse with them in pots, or planted in a warm part of the flower border, about the beginning of June. It will begin to flower about July, and generally has perfected seeds by September; although, it will continue to bloom till destroyed by the frost, as there is a constant succession of blossoms.

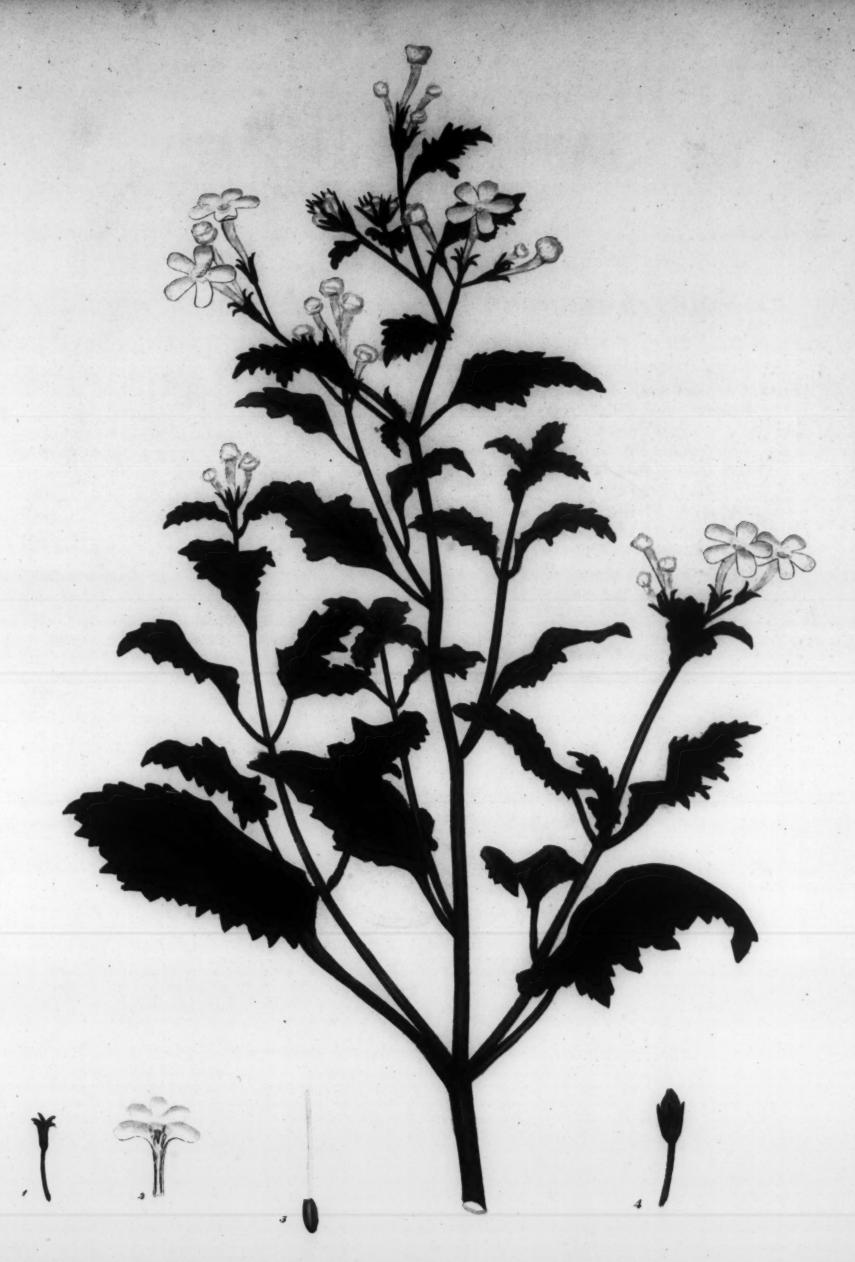


PLATE LXXXI. SOWERBIA JUNCEA.

Rush-like Sowerbia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Involucrum hexaphyllum, multiflorum; foliolis erectis, scariosis, persistentibus.

COROLLA. Petala fex, infera, perfistentia; laciniis ovatis, concavis.

STAMINA. Filamenta fex, sub-globosa, carnosa, germen cingens; ex quibus tria biantherifera, sterilibus tribus interstinctis. Antheræ geminæ, lineares, erectæ.

PISTILLUM. Germen superum. Stylus filiformis, longitudine staminum. Stigma simplex.

Pericarpium. Capfula obtufetrigona, oblonga, trilocularis, trivalvis.

SEMINA plura, angulata.

EMPALEMENT. Fence fix-leaved, containing many flowers; the small leaves are upright, skinny, and permanent.

BLOSSOM. Six petals, beneath and remaining; fegments egg-shape, and concave.

CHIVES. Six threads almost round, fleshy, furrounding the seed bud; of which three bear two chives, each parted by three sterile ones. Tips double, linear, and upright.

POINTAL. Seed-bud above. Shaft threadfhaped, the length of the chives. Summit fimple.

SEED-VESSEL. Capfule bluntly three-fided, oblong, three-celled, three-valved.

SEEDS many, angular.

SPECIFIC CHARACTER.

Sowerbia, foliis teretibus, mucronatis; scapo nudo, slexuoso; umbella globosa; sloribus petiolis longissimis. Sowerbia, with cylindrical leaves pointed at the ends; flower-stem naked and crooked; the umbel globular; flowers with very long foot-stalks.

REFERENCE TO THE PLATE.

- 1. The Fence.
- 2. A Bloffom complete.
- 3. The Chives expanded.
- 4. The Pointal.

The very great resemblance this plant bears in habit, to some species of the garlick and rush, led us, at first sight, to consider it of one of those Genera: but as Dr. Smith has in the fourth Volume of the Linn. Trans. p. 220, constituted it a new genus, from the construction of the chives, we make no scruple to follow such good authority. It is named after Mr. James Sowerby, so well known for his numerous botanical engravings, as attached to different works; but especially, for his excellent coloured plates of English plants. Messrs. Lee and Kennedy of Hammersmith, were the first, who raised this plant from seeds, received in 1792 from Botany Bay. Our drawing was taken in May 1798, the first time it flowered there; it is the full size of the plant, the flower-stem cut off, it being twice the length of the leaves. There is no smell to any part of the plant; but nevertheless, it is very desirable in the greenhouse, from the character of the flowers, which retain their colour with little change, till the seeds are perfected. To increase it, the roots may be parted early in spring, and should be planted in peat earth.

Sovertia juncea.

PLATE LXXXII. BANKSIA SERRATA.

Sawed-leaved Banksia.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

beneath.

pointed.

seeds.

CHIVES.

GENERIC CHARACTER. Schreb. Gen. Plant. 191.

CALYX. Perianthium monophyllum, quadrifidum, inferum.

COROLLA monopetala; tubus cylindraceus, brevisimus; limbus longissimus, quadripartitus; laciniis linearibus, apice lanceolatis, interne soveola excavatis, acutis.

STAMINA. Filamenta nulla. Antheræ quatuor, lanceolatæ, in foveola laciniarum corollæ fessiles.

PISTILLUM. Germen fuperum, minutum. Stylus filiformis, rigidus, corolla longior. Stigma pyramidatum, acutum.

Pericarpium. Capfula ovata, feu globofa, lignofa, unilocularis, bivalvis.

Semina duo, obovata hine convexa inde plana, ala membranacea terminata.

OBS. In quibusdam speciebus seminibus interjectum est dissepimentum liberum, sigura et magnitudine cavitatis loculamenti, coriaceo-lignosum, semibisidum. Grætner de fruct.

SPECIFIC CHARACTER.

Bankfia foliis linearibus, in petiolum attenuatis, æqualiter ferratis, apice truncatis cum mucrone. Bankfia with linear leaves, tapering to the footflalks, equally fawed at the edge, appearing cut off at the end with a fharp point.

EMPALEMENT. Cup of one leaf, four-cleft and

BLOSSOM of one petal; tube cylindrical, and

which are hollowed out and sharp.

Threads none.

of the fegments of the bloffom.

woody, one cell, two valves.

fkinny wing at the end.

very fhort; border very long, of four divi-

fions; fegments linear, lance-shaped at the

ends, having fmall holes on the infide,

shaped, fitting close within the small holes

Shaft thread-shaped, stiff, and longer than the blossom. Summit pyramidal, and sharp

POINTAL. Seed-bud above and very fmall.

SEED VESSEL. Capfule egg-shaped or globular,

SEEDS two, inverfely egg-shaped, convex on the

Obs. In some species there is found between the

one fide and flat on the other, having a

feeds a loofe partition, the shape and fize of

the hollow of the ceil, tough, woody, and half cleft in two. Grætner on fruits and

Tips four, lance-

REFERENCE TO THE PLATE.

- 1. A Flower, the fummit not yet escaped from the Chives.
- 2. The fame with the summit relieved; magnified, to shew more clearly the shape of the petals, and the singular situation of the Chives.
- 3. The Pointal, natural fize.
- 4. A ripe Seed.

This species of Banksia, was the first to vegetate amongst the number of different seeds, which were received by Messis. Lee and Kennedy, from Botany Bay in 1788; thus, has the pre-eminence of seniority here, to all the plants which have been introduced from thence, to Great Britain. From the living and dead specimens we have already seen, this Genus bids fair to rival Protea in the number of its different species; from which, nature seems to have marked but a slight line for Generic distinction. Our figure was taken from a plant now in flower in the greenhouse, (we believe for the first time in Europe,) at the agreeable retreat of J. Ord, Esq. Purser's-cross, Fulham, being nearly seven feet high; indeed, we have seen specimens which have attained to twelve seet, and more. It is increased by cuttings, and will grow in almost any earth. The cones to which the seed-vessels are fixed, something resemble those of the stone pine, but much larger, and the wood more hard: the seeds are inclosed in capsules which are placed at a considerable distance from each other, at irregular intervals; the spaces filled up with long harsh threads, and apparently abortive seed-vessels.



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PLATE LXXXIII. MORÆA TRICOLOR.

Three-coloured Moræa.

CLASS III. ORDER I. TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves.

COROLLA hexapetala, patens; petala tria interiora patentia, angustiora.

STAMINA. Filamenta tria, brevia. Antheræ oblongæ.

PISTILLUM. Germen inferum, oblongum. Stylus fimplex, brevissimus. Stigmata tria, bisida.

Pericarpium. Capfula trigona, trifulcata, trilocularis.

SEMINA plurima, rotunda.

EMPALEMENT. Sheaths of two valves.

BLOSSOM fix petals, spreading; the three innermost petals are more spread out and narrower.

CHIVES. Three fhort threads. Tips oblong.

POINTAL. Seed-bud beneath and oblong. Shaft fimple, and very fhort. Summits three, two-cleft.

SEED-VESSEL. Capfule three fided, three-fur-rowed, three cells.

SEEDS many, and round.

SPECIFIC CHARACTER.

Moræa scapo teriti; foliis radicalibus, lanceolatis, canaliculatis, scapo longiores; floribus terminalibus, tricoloratis. Moræa with a round flower-stem; the leaves grow from the root, are lance-shaped, channelled, and longer than the flower stem; the flowers are terminal, and three-coloured.

REFERENCE TO THE PLATE.

- 1. An outer Petal of the Bloffom.
- 2. An inner Petal of the same.
- 3. The Chives and Pointal; the petals being cut off, to expose the fituation of the Chives hid under the summits.

To G. Hibbert, Esq. of Clapham Common, we owe the introduction of this beautiful little Moræa, he having received it from his collector at the Cape, in the spring of 1799. It is certainly a perfectly new species here, and we believe has not been seen to flower in Europe before; as it is not in the extensive Collections, of the Emperor of Germany; at least it is not to be found amongst the many sigured by Professor Jacquin. The very short duration of the blossoms, at first, had determined us to name it specifically, sugax; but finding we were anticipated in that name, by Jacquin, in his Hortus. III. tab. 26, we have adopted that of tricolor. The drawing was made at Clapham this year, in October; although we conceive the regular season for its blowing would be, June, or July, if planted like other Cape bulbs in autumn. The only means of seeing this plant in perfection, is, by keeping it entirely from the air when near flowering, as it is too delicate to bear the least exposure; it begins to expand about twelve o'clock, and is quite decayed by three. From every appearance, without a supply from the Cape, this delicate little bulb will, (as many others have) be soon lost to this country.

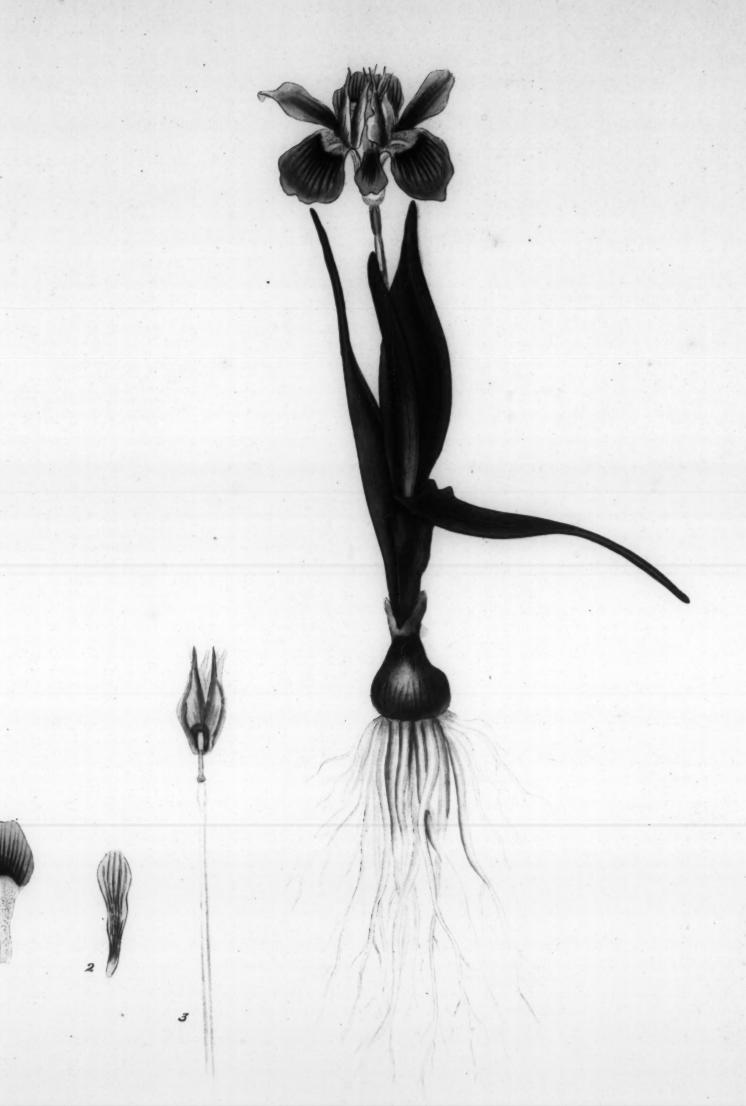


PLATE LXXXIV.

BUCHNERA PEDUNCULATA.

Solitary-flowered Buchnera.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

ESSENTIAL GENERIC CHARACTER.

CALYX quinque-dentatus. Corollæ limbus quinquefidus, æqualis; lobis cordatis. Capfula bilocularis.

Cur five-toothed. The border of the bloffom five-cleft, equal; the lobes heart-shaped. Capfule two-celled.

See BUCHNERA FŒTIDA. Pl. LXXX.

SPECIFIC CHARACTER.

Buchnera, foliis dentato-finuatis; floribus folitariis, pedunculis longissimis.

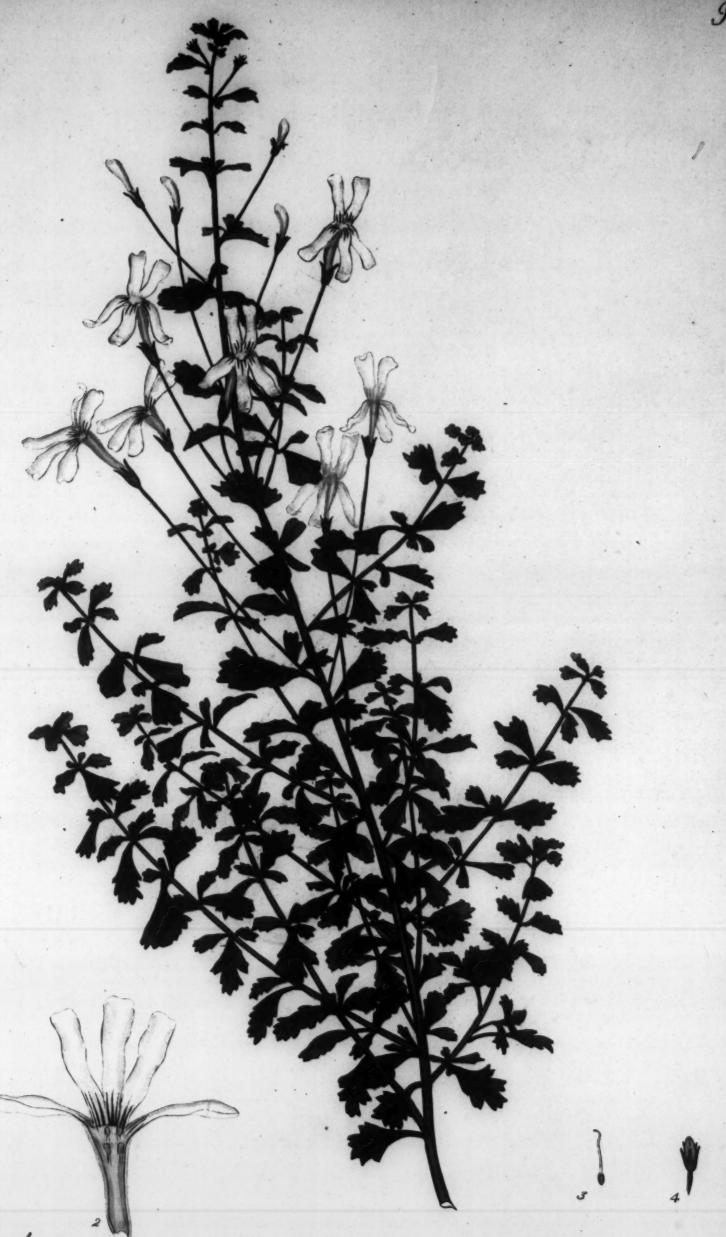
Buchnera, with leaves that are indentedly toothed; flowers folitary, with very long foot-stalks.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. A Flower cut open, magnified.
- 3. The Pointal.
- 4. A Capfule.

This is another beautiful little species of Cape Buchnera, and which, we can consider as little better than biennial; much similar, to some species of different genera from thence; such as, Hebenstreitia, Mahernia, &c. For although they produce woody stems, yet the plants seldom last beyond the second year. From their short duration, it is necessary to keep up a succession yearly; which is done, by making cuttings of them early in spring. Our drawing represents the branch of a plant, in the collection of R. James, Esq. Grosvenor-place, taken in the month of July 1799. It is a very shewy greenhouse plant, and should be plotted in rich mould; if kept free from damps, will continue to flower till the end of November.

Plas.



Buchnera pedunculata.

PLATE LXXXV. MAHERNIA ODORATA.

Sweet Mahernia.

CLASS V. ORDER V.

PENTANDRIA PENTAGYNIA. Five Chives. Five Pointals.

GENERIC CHARACTER.

CALYX. Perianthium monopetalum, quinquefidum, campanulatum; dentibus fubulatis, longioribus; perfiftens.

COROLLA. Petala quinque, cordata, oblonga, patentia, calyce duplo longiora.

Neclaria quinque, obcordata, pedicellata, germen cingentia, calyce breviora.

STAMINA. Filamenta quinque, capillaria, nectario infidentia, calyce breviora. Antheræ oblongæ, acuminatæ, erecæ.

Pistillum. Germen subpedicellatum, obovatum, quinquangulum. Styli quinque, setacei, erecti, longitudine petalorum. Stigmata simplicia.

Pericarpium. Capfula ovata, quinquelocularis, quinquevalvis.

Semina nonnulla, reniformia.

EMPALEMENT. Cup one leaf, five-cleft, bell-fhaped; the teeth awl-fhaped, and longer; remaining.

BLOSSOM. Five petals, heart-shaped, oblong, spreading, twice the length of the cup.

Honey-cups five, inversely heart-shaped, having little foot-stalks, embracing the seed-bud, shorter than the cup.

CHIVES. Five threads, hair like, fitting on the honey-cups, shorter than the cup. Tips oblong, tapered to a point, and upright.

POINTAL. Seed-bud supported on a very short foot-stalk, inversely egg shaped, sive-angled. Shafts five, like bristles, upright, the length of the petals. Summits simple.

SEED-VESSEL. Capfule egg-shaped, five cells, five valves.

SEEDS a few, kidney-shaped.

SPECIFIC CHARACTER.

Mahernia foliis lanceolatis, glabris, apice dentatis; pedunculis bifloris; corollis luteis, odoratiflimis. Mahernia with lance-shaped leaves, smooth and toothed at the end; foot-stalks bearing two flowers; the blossoms yellow and very sweet.

REFERENCE TO THE PLATE.

- 1. The cup, (natural fize).
- 2. The Chives, Honey-cups, and Pointals, as they ftand in the flower.
- 3. The same, with the Chives thrown back, as far as the slight junction of the honey-cups will permit, without tearing.
- 4. A Chive with its honey-cup, (magnified).
- 5. The Seed-bud and Pointals, (magnified).

Many species of this Genus have, hitherto, been arranged as Hermannias, to which they are undoubtedly very nigh affined; in nothing essentially varying, but in the character of the chives, being, in this, placed on honey cups, which are wanting in the other; the same natural appearance however of the junction of the supporters of the tips, being common to both. From this small change of the identity of character, so necessary in our artificial system, they are thrown to a wide distance in classification; the one standing in the fifth, the other in the fixteenth class! The Mahernia odorata is from the Cape of Good Hope, and was sent in seeds to England about the year 1792. It is but a short-lived greenhouse plant, and must be raised every two years, at least, from cuttings; which should be made about the beginning of March, and placed on a gentle hot-bed, they will by this means become good fized plants by midsummer. The flavour of the blossoms is exactly that of the Jonquil, it continues to flower through the whole year, but is as yet to be found in few collections, although from its different attractions we have no doubt of seeing it soon in most. Rich earth, of old cow dung, and loam, seems to be the soil it most affects. Our drawing was made at the nursery Hammersmith, in July 1799.





PLATE LXXXVI. BIGNONIA PANDORANA.

Norfolk Island Trumpet Flower.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

ESSENTIAL GENERIC CHARACTER.

CALYX quinquefidus, cyathiformis.

COROLLA fauce campanulata, quinquefida, fubtus ventricofa. Siliqua bilocularis. Semina membranaceo-alata. EMPALEMENT, five-cleft, cup-shaped.

Blossom bell-shaped at the mouth, five-cleft, and bellied beneath. A pod of two cells. Seed winged with a skinny membrane.

See Pl. XLIII. Bignonia Leucoxylon. Vol. I.

SPECIFIC CHARACTER.

Bignonia foliis pinnatis; foliolis lanceolatis, dentatis; caule volubili; floribus racemofis, terminalibus. Trumpet Flower with winged leaves; the small leaves are lance-shaped, and toothed; a climbing stem; the flowers grow in bunches, and terminate the branches.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. A Flower cut open, to expose the fituation of the Chives.
- 3. The Pointal, and Seed-bud, (magnified).
- 4. A Seed.

This species of Trumpet Flower, is a native of Norfolk Island in the Pacific Ocean, lying in 29 deg. 2 min. south lat.; therefore, must be kept with us as a greenhouse plant; and, as a creeper, may be placed to twine round the pillars, or to cover trellis work; being of quick growth (if planted in peat earth,) and slowering abundantly from the month of March, 'till June. It is easily increased by cuttings, made in the spring, or by suckers, which it frequently produces from the root. The plant from which our drawing was made, flowered (and we believe for the first time in England) in 1798, in the collection of J. Vere, Esq. Kensington Gore.

Naturalists, when in detailing the history of the various articles passing under their review, should receive with caution, any matter which seems tending to the marvellous; but for the authenticity of the authority, from whence we are furnished with the account of the singularly pestiferous character of this plant, we can with confidence pledge ourselves. Colonel Paterson, now commanding at Port Jackson, New Holland, sent the seeds from Norfolk Island, when he was stationed there, to Messrs. Lee and Kennedy Hammersmith, who first raised it, in the year 1793. The N. I. Trumpet Flower is, in its native soil, a deciduous plant; upon the return of the season, in which the young tendrils begin to shoot, and the leaves begin to appear; within sisteen, or twenty days, the whole plant is entirely covered with a white downy insect, of the genus Aphis, something similar to our blight; which, in a very short time from their sirst appearance on this plant, become so completely dispersed over every vegetable production, that scarce a green leaf is to be seen through the whole extent of the island. So great a plague was this insect thought to be, from its effects on vegetation, by those who were sent to colonize the island, that it was considered as one of the principal reasons for abandoning the settlement.



Bignonia pandorana

PLATE LXXXVII.

IXIA ARISTATA. Var. atropurpurea.

Ragged-sheathed Ixia. Var. dark purple.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, patens, æqualis. Stigmata tria, erectiusculo-patula.

BLOSSOM fix divisions, spreading, and equal.

Summits three, nearly upright and spreading.

See Pl. XIV. Vol. I. Ixia reflexa.

SPECIFIC CHARACTER.

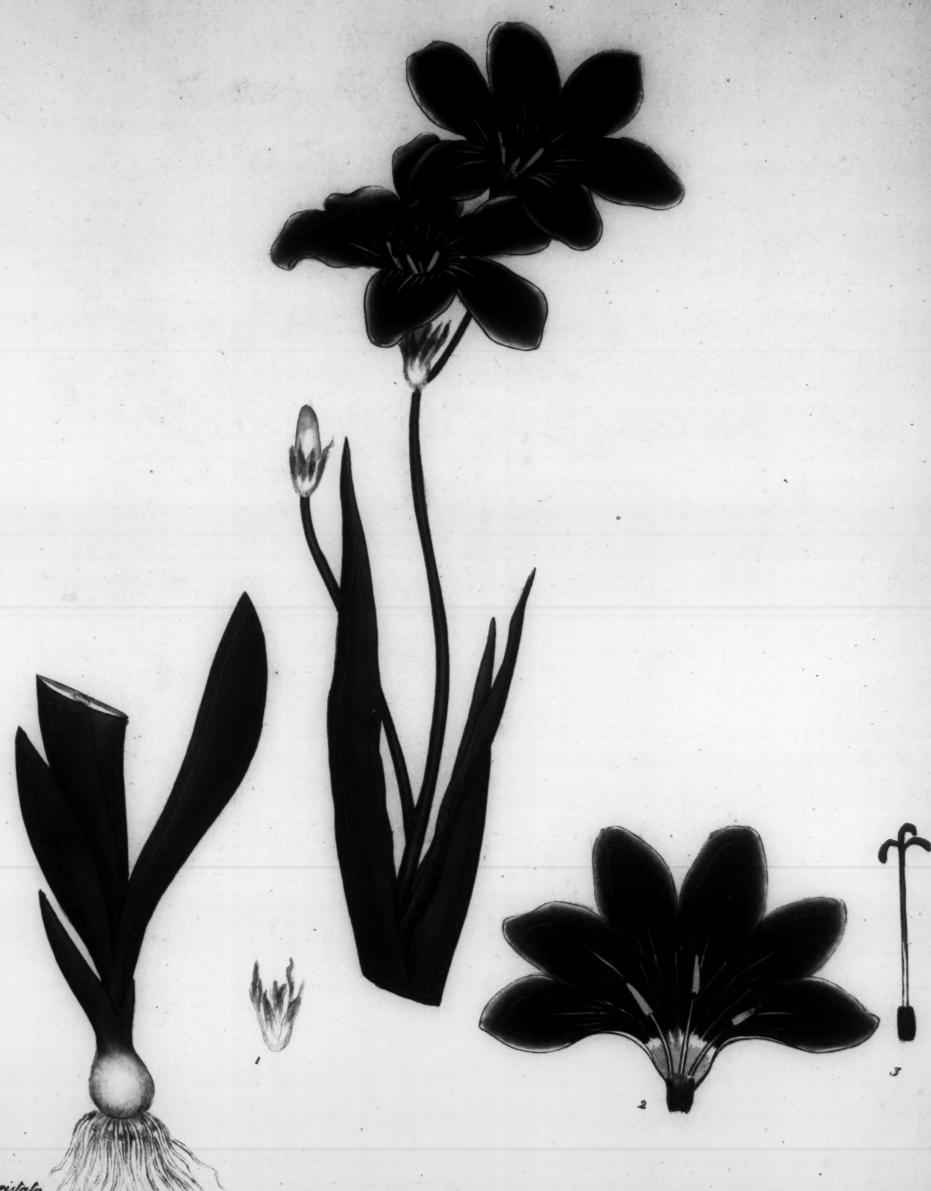
Ixia foliis falcatis, glabris, amplexicaulibus; fcapo fub-biflora; fpathis laceris.

Ixia with scimitar-shaped leaves, smooth and embracing the stem; slower-stem mostly with two slowers; sheaths appearing torn.

REFERENCE TO THE PLATE.

- 1. The sheath.
- 2. A Flower cut open.
- 3. The Pointal, complete.

This truly specious Ixia, has at different periods long since, been seen in our exotic collections; but the delicacy of its root, and of consequence; the difficulty of preserving it, when out of flower, was, no doubt, the occasion of its having been as often lost to us for a time. To the Dutch we are indebted for the last introduction of it to this country, about four years since, amongst many others; from their immense collections of Cape bulbs at Haarlem. Although the root is particularly susceptible of wet, yet, by timely taking up the bulb, even before the upper part of the plant is decayed; and keeping it entirely free from moisture, till it is again planted in October, there will be little danger of its perishing. Our figure was taken in the month of June 1799, at Clapham, from a plant in the Collection of G. Hibbert, Esq. Light sandy peat, with a small portion of rotten old cowdung, will give it the most vigorous growth.



ia aristata

PLATE LXXXVIII. ERANTHEMUM PULCHELLUM.

Blue-flowered Eranthemum.

CLASS II. ORDER I.

DIANDRIA MONOGYNIA. Two Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quinquefidum, tubulofum, erectum, membranaceum, perfiftens.

COROLLA monopetala, infundibuliformis; tubus filiformis, longissimus. Limbus quinque-partitus, planus; laciniis obovatis, æqualibus.

STAMINA. Filamenta duo, ad basin spiralia, in fauce corollæ. Antheræ subovatæ, compressæ, extra tubum.

PISTILLUM. Germen ovatum, compressum. Stylus filiformis, longitudine staminum. Stigmata duo, inæqualia, erecta.

Pericarpium. Capíula fpathulata, compressa, bivalvis, bilocularis, dissipimento valvulis contrario.

SEMINA folitaria, lentiformia.

EMPALEMENT. Cup five cleft, tubular, upright, fkinny, and remaining.

BLOSSOM one petal, funnel-shaped; tube thread-shaped, and very long. Border divided into five, and flat; the segments are inversely egg-shaped, and equal.

CHIVES. Two threads, spiral at the base, at the mouth of the blossom. Tips nearly egg-shaped, flattened, and without the tube.

POINTAL. Seed bud egg-shaped and flattened. Shaft thread-shaped, the length of the chives. Summits two unequal, and upright.

SEED-VESSEL. Capfule spatula shape, flattened, two valves, two cells, the partition contrary to the valves.

SEEDS folitary, lentil shape.

SPECIFIC CHARACTER.

Eranthemum foliis lanceolato-ovatis, nervosis; floribus spicatis; bracteis lanceolatis, imbricatis.

Eranthemum with lance-shaped, oval, and strongly nerved leaves; the flowers grow in spikes; the floral leaves are lance-shaped, and tiled.

REFERENCE TO THE PLATE.

- 1. The Empalement, with its four small leastets.
- 2. The Blossom cut open, to shew the part of insertion of the Chives.
- 3. One of the Chives, (magnified.)
- 4. The Pointal, (natural fize.)
- 5. The fame, (magnified.)
- 6. The Seed-bud.
- 7. A Seed.

ERANTHEMUM, although standing in our ancientest tables, as a name to different plants; must have been, hitherto, confidered as a dead letter in all our modern ones, as attached to the tribe of plants it now titles: but perhaps, to none of the former more aptly could it have been applied; (especially this species, as the Greek word Ἡράνθεμον, a compound of Ἡρ the spring, and ἀνθέω to blossom, fairly indicates;) fince the E. pulchellum first begins to flower in January, and continues to blossom till May. Linnæus in treating this Genus, acknowledges to have feen but one imperfect specimen; and from this circumstance, left the description of the seed-vessel, and seed, to be determined by future Botanists; as yet, that has not been accomplished, even by the indefatigable and accurate Schreber: indeed, had the character of the pointal been likewise omitted, it would have been as well; since, in place of one, the two unequal fummits, (which might escape observation in a dried specimen, from their disproportion in length, and upright fituation;) point out a stronger Generical distinction from Justicia, to which it much affines, than either, the regular shape of the limb of the blossom, or the situation of the chives. Our species is a native of the coast of Coromandel, in the East Indies, and was first received in seeds from Dr. Roxburg, at the Royal gardens Kew, in the year 1796. It is a most desirable plant, for although it has hitherto been kept in the hot-house, we have no doubt from its flowering and thriving there, with fo little care, in any fituation; but that it will foon be confidered as a proper inhabitant of the greenhouse. It is with the greatest ease, and certainty, increased by cuttings. Our drawing was made this month, from a plant in flower at the Hammersmith nursery.



PLATE LXXXIX.

GNIDIA LÆVIGATA.

Shining-leaved Gnidia.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX infundibuliformis, 4-fidus. Petala quatuor, calyci inferta. Semen unum, fubbaccatum. Cup funnel-shaped, 4-cleft. Four petals fixed into the cup. One seed, something like a berry.

See Gnidia pinifolia, Pl. LII. Vol. I.

SPECIFIC CHARACTER.

Gnidia foliis oppofitis, glabris, ovatis, quadrifariam imbricatis; floribus terminalibus, fessilibus, luteis. Gnidia with opposite smooth egg-shaped leaves, forming four angles and tiled; flowers terminate the branches, sitting close to the stem, and yellow.

REFERENCE TO THE PLATE.

- 1. A Bloffom complete.
- 2. The fame cut open, with the Chives attached; the Pointal taken out.
- 3. The Seed-bud and Pointal, (magnified.)

This Gnidia is from the Cape of Good Hope, from whence it was first sent to England about the year 1783, by Mr. F. Masson to the Royal gardens Kew. It is a tender, and delicate greenhouse plant, very subject to be destroyed by the autumnal rains, or over watering during the winter. It is with great difficulty raised from cuttings, and its seeds seldom or ever, we believe, are perfected with us; from which circumstance, it is to be found in very few collections. Our drawing was made from a plant, in the possession of G. Hibbert, Esq. Clapham, about the middle of July 1799.



Gnidia lavigata

PLATE XC. SEPTAS CAPENSIS.

Cape Septas.

CLASS VII. ORDER IV.

HEPTANDRIA HEPTAGYNIA. Seven Chives. Seven Pointals.

GENERIC CHARACTER.

CALYX. Perianthium feptempartitum, patens, acutum, perfiftens.

COROLLA. Petala feptem, oblonga, æqualia, calyce duplo longiora.

STAMINA. Filamenta septem, subulata, longitudine calycis. Antheræ subovatæ, erectæ.

PISTILLUM. Germina feptem, oblonga, definentia in stylos subulatos, longitudine staminum. Stigmata obtusiuscula.

Pericarpium. Capfula feptem, oblongæ, acutæ, parallelæ, univalves.

SEMINA plurima.

EMPALEMENT, Cup of feven divisions, spreading, sharp-pointed, and remaining.

BLOSSOM. Seven petals, oblong, equal, twice the length of the cup.

CHIVES. Seven threads, awl-shaped, the length of the cup. Tips nearly egg-shaped, and upright.

POINTAL. Seven feed buds, oblong, and ending in awl-shaped shafts, the length of the Chives. Summits bluntish.

Seed-vessel. Seven capfules, oblong, fharppointed, parallel, and of one valve.

SEEDS many.

SPECIFIC CHARACTER.

Septas, foliis fubrotundis, crenulatis, oppofitis; glabris; radice tuberofa.

Septas with roundish leaves, slightly scolloped, opposite and smooth; root tuberous.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. The Chives, and Pointals, (magnified).
- 3. One of the Pointals detached, (natural fize).

We are happy in having procured for the entertainment of our botanical friends, a specimen of so singular a plant as the Septas: which, from the conformity of its constituent generic characters in point of numbers, has given it the title it bears and forming for itself an order of plants, in which it stands alone. No plant is better known to botanists than Septas by name; but as yet, there exists only one miserable uncoloured figure of it; which is to be found in the Mantissa of Plukenet, tab. 340, sig. 9. The first plants seen of Septas in England, were purchased in roots from Holland, under the name of Saxifraga Tuberosa, by Messis. Lee and Kennedy Hammersmith. The beginning of August this year, a drawing was taken from a plant in the collection of G. Hibbert, Esq. Clapham, he having received some fine bulbs of it, in the spring, from his collector at the Cape. There are few plants rival Septas for beauty that are of equal size; it is herbaceous, should be removed from its pot when in a state of inaction, and dried like the Anemonie. The bulbs may be cut, or parted at the time of removal for propagation.



Septas Capensis.

PLATE XCI.

CAMELLIA JAPONICA. Var. flore pleno variegato.

Double-striped Camellia.

CLASS XVI. ORDER VI. of Schreber's 8th ed. of Gen. Plant.

MONODELPHIA POLYANDRIA. Threads united. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX imbricatus, polyphyllus; foliolis interioribus majoribus.

EMPALEMENT tiled, many leaved; the inner leaves the largest.

SPECIFIC CHARACTER OF VARIETY.

Camellia foliis brevioribus, latioribus; floribus | Camellia with shorter and broader leaves; flowers | double and striped.

In hopes that the fubject will plead our excuse, in thus again, obtruding a kind of nonentity, in reference to the sexual system, on our scientific friends; and that a figure, of so rare, and beautiful a plant, would be agreeable to all; we have, once more, put by the etiquette of science, for the charms of beauty; yet for this deviation, we think an apology necessary, as it is undoubtedly not conformable to the plan of our undertaking.

This variety of the Camellia Japonica, is of the same date in our gardens, as the double white, and was introduced through the same medium. As yet this plant is found in but very sew collections, and is sold at a very high price; not being of free growth, sew cuttings, or grafts can be obtained. It has hitherto, been treated as a hothouse plant; but there is no doubt it is equally hardy with the common fort, upon which, all the plants we have as yet seen, and indeed those that were first imported from China, were grafted; an instance in proof, that horticulture must have, there, attained to a considerable degree of perfection, in the operative part: as well as, that possessing double flowering varieties, of their most beautiful plants, which are only produced by a series of cultivation, for ages; incontestably proves the antiquity of the art, (if any fresh proofs were necessary,) in that country. Our figure was made from a drawing taken partly, from a plant which flowered in August last year, in the collection of J. Hibbert, Esq. Clapham; and partly from one now (April) in full bloom, in the conservatory of R. H. James, Esq. Grosvenor-Place; the only ones we have as yet seen in flower; wherefore the time of flowering cannot as yet be fixed.

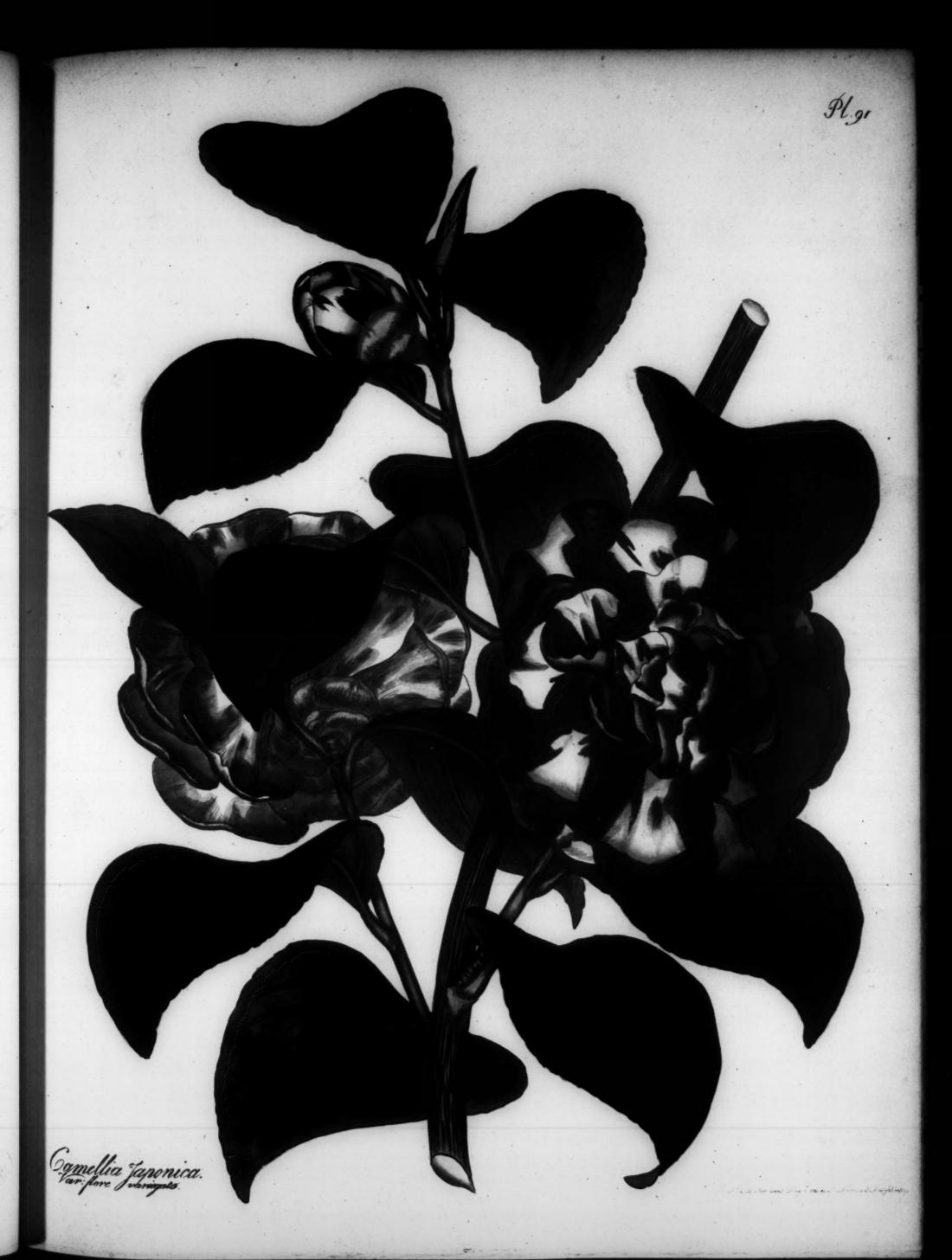


PLATE XCII. CRINUM SPIRALE.

Spiral-stalked Asphodel Lily.

CLASS VI. ORDER I. HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Involucrum spathæforme, bifolium, oblongum, umbelluliserum, post dehiscentiam reslexum.

COROLLA monopetala, infundibuliformis. Tubus oblongus, cylindraceus. Limbus fexpartitus; laciniis lanceolato-linearibus, concavis, reflexis, quarum tres alternæ appendiculo uncinato diffinctæ.

STAMINA. Filamenta sex, subulata, e bafi limbi, longitudine limbi, conniventia. Antheræ oblongæ, lineares, assurgentes, incumbentes.

PISTILLUM. Germen inferum. Stylus filiformis, longitudine floris. Stigma trifidum, minimum.

Pericarpium. Capfula fub-ovata, trilocula-

SEMINA plura.

ing at the lower part.

Chives. Threads fix, awl-shaped, growing from the lower part of the border, and of its length, and inclining together. Tips ob-

ting being reflexed.

long, linear, turned up at the ends, and lying on the threads.

Pointal. Seed-bud beneath. Shaft threadfhaped, the length of the flower. Summit three-cleft, and very fmall.

EMPALEMENT. Fence sheath-shaped, two-leaved,

BLOSSOM one leaf, funnel-shaped. Tube ob-

oblong, bearing a fmall umbel, after split-

long, and cylindrical. Border divided into

fix fegments, that are linearly lance-fhaped,

concave, and reflexed, of which three alter-

nate ones are marked by a small claw hang-

SEED-VESSEL. Capfule nearly egg-shaped, three celled.

SEEDS many.

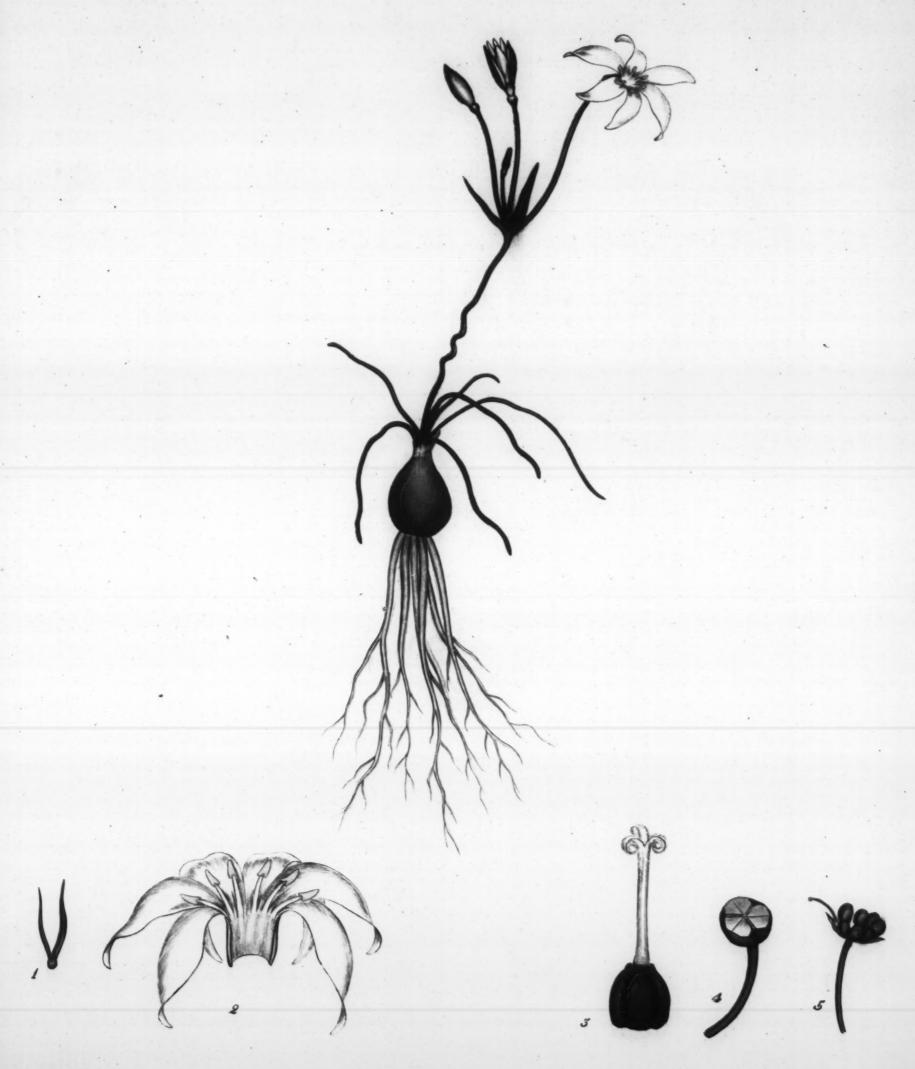
SPECIFIC CHARACTER.

Crinum foliis filiformibus; scapo filiformi, spirali. Asphodel Lily, with thread-shaped leaves; flower-stem thread-shaped, and spiral.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. A Flower, cut open and magnified; to shew the point of insertion of the Chives, at the base of the border.
- 3. The Pointal and Seed-bud (magnified).
- 4. The Seed-bud cut transversely, and magnified; to shew the situation of the seeds in the cells, before the splitting of the outer coat, when matured.
- 5. The Seeds, as they appear after the burfting of the containing coat, and of their natural fize.

This curious little plant, has been figured by professor Jacquin in his Ic. rar. 2. tab. 363, under the name of Crinum Tenellum; Thunberg, (who no doubt faw the living plant) in his Prodromus, p. 58, gave it first, the specific title of Spiralis, which to us seems the best possible, we have retained it; although, we differ from him as to the Genus, and which there is no doubt every botanist will, on the examination of the figure, with its appendages. That this plant should ever have been placed under Hæmanthus, by any botanist, is certainly matter of wonder, yet the point is too clear to be contended; scarce one of the essential constituent characters, of the genus, are to be found in our plant, and yet so perfectly in every part answering to Crinum. In Hæmanthus, the fence is composed of many leaves; the segments of the border, standing upright; the Chives longer than the blosfom, and fixed into the tube; the Summit fimple! &c. &c. We submit this, nevertheless, with deference to superior judgments, as a late publication of much repute, has this plant, under the Generic title we have rejected. The drawing was made in the beginning of March, this year, at Messrs. Lee and Kennedy's, Hammersmith; by whom, it was received from the Cape of Good Hope in 1792. It is a very hardy bulb, requiring no more protection than a pit, to secure it from the froft. It increases but flowly by the root, but occasionally produces ripe seeds; and should be kept constantly in its pot, in a mixture of peat and loam.



Grinum spirale.

Tub. as the Act screets May 1. 1000.

PLATE XCIII.

ASTER REFLEXUS.

Reflexed-leaved Starwort.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

RECEPT. nudum. Pappus fimplex. Cor. radii plures 10. Cal. imbricati fquamæ interiores patulæ.

RECEPT. naked. Feather simple. Florets of the circumference 10 or more. Cup tiled, the innermost scales spread outward.

See After dentatus, Pl. LXI.

SPECIFIC CHARACTER.

After fruticosus, foliis ovatis sub-imbricatis, recurvatis, serratis; floribus solitariis, terminalibus, sessilibus. Starwort with egg-shaped leaves, almost tiled, bent backward and sawed; flowers grow folitary, terminal, and sit close to the ends of the branches.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. A Floret of the circumference.
- 3. The Pointal of the foregoing.
- 4. A Floret of the centre (magnified).
- 5. The Chives and Pointal of a floret of the centre (magnified).
- 6. The Shaft and Summit of the same (magnified).

THE fingular merit of this pretty greenhouse plant, is, that its blossoms are still to be seen through the whole year; and is kept with as little care, as is required for any. It is with ease, and certainty, increased by cuttings, put in about the month of May; or by seeds, which it sometimes perfects by being kept from the rain in autumn. It is a plant known by name, to most botanists; but has not been introduced to us, till the year 1794, when it was received in seeds from the Cape, at the nursery Hammersmith; where it has slowered, these two successive years, and where our figure was taken.

GALAXIA OVATA.

Oval-leaved Galaxia.

CLASS XVI. ORDER I.

MONADELPHIA TRIANDRIA. Threads united. Three Chives.

GENERIC CHARACTER.

CALYX. Spatha univalvis, membranacea, connivens.

COROLLA monopetala, fupra; tubus filiformis, longus, erectus, apice paullulum ampliatus; limbus fexpartitus; laciniis obovatis, patentibus.

STAMINA. Filamenta tria, in cylindrum conata. Antheræ ovatæ.

PISTILLUM. Germen inferum, obtuse triangulare, glabrum. Stylus filiformis, staminibus paullo longior. Stigmata tria, filiformi-multipartita, patentia.

Pericarpium. Capfula oblongo-fubeylindrica, trifulca, trilocularis, trivalvis.

Semina plurima, globofa, minima.

EMPALEMENT. Sheath of one valve, skinny, and closing.

BLOSSOM, one leaf, above; tube thread-shaped, long, upright, the upper part a little widened; border divided into fix parts; fegments inversely egg-shaped and spreading.

CHIVES. Three threads forming a cylinder. Tips egg-shaped.

POINTAL. Seed bud beneath, obtufely triangular and smooth. Shaft thread-shaped, a little longer than the chives. Three summits, each divided into a number of small threads, and spreading.

SEED-VESSEL. Capfule of an oblong, and almost cylindrical shape, with three furrows, three cells, and three valves.

SEEDS numerous, globular, and fmall.

SPECIFIC CHARACTER.

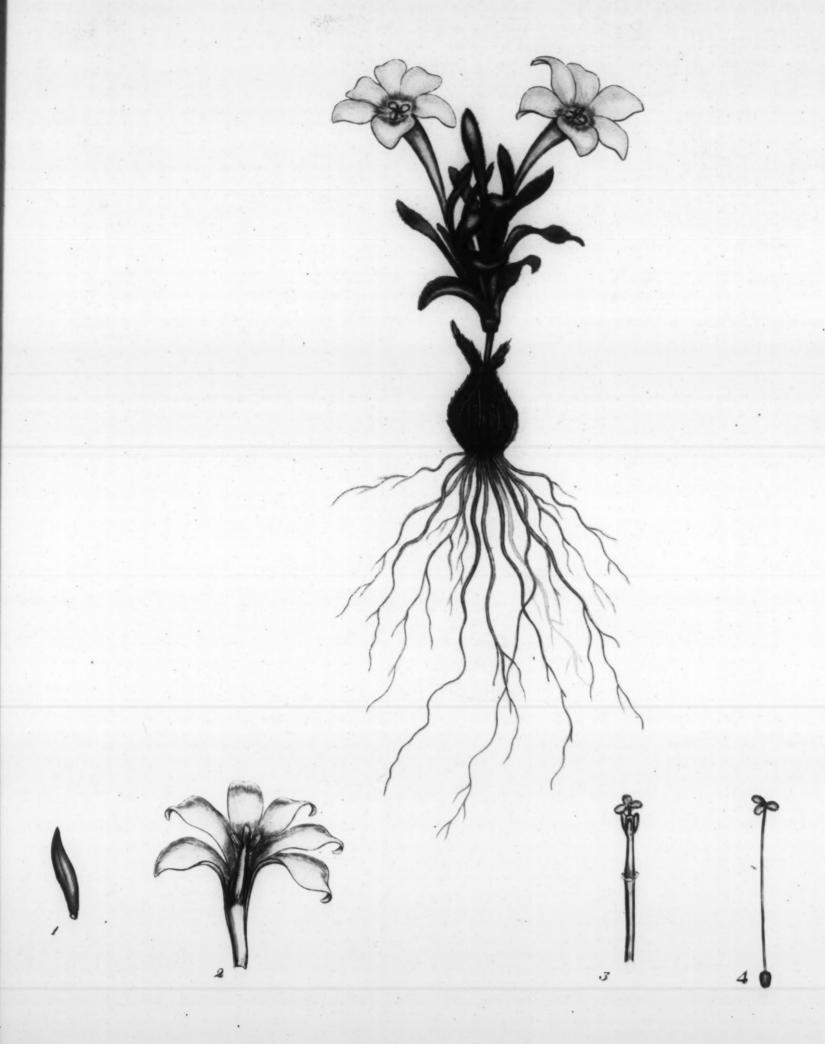
Galaxa foliis ovatis margine ciliatis; corollis longissimis, arcuatis, flavis.

Galaxia with egg-shaped leaves, fringed at the edge; blossoms very long, bowed, and yellow.

REFERENCE TO THE PLATE.

- 1. The Sheath.
- 2. A Flower cut open, to shew where the threads are fixed to the tube of the blossom.
- 3. The Chives with the Pointal inclosed, the Blossom cut away.
- 4. The Pointal and Seed-bud.

Any species of this Genus, must be interesting to the English botanist; as, till last year, not one was to be found, in any collection of this country. The G. ovata is figured in Cavanilles, Dist. 6. p. 340. t. 189; and described by Thunberg, in his Nova Genera Plantarum, p. 50. It is a most fingular little plant, but we much fear will prove a fugitive to us; like the Ferraria, (to which in many particulars it very nearly affines,) its beauty is but of a few hours duration: indeed, so short is the period, that had not Mr. Hibbert taken a sketch of it, whilst in persection; and from which our drawing was completed, we could not have accomplished a figure of it. As yet, the true season of its flowering cannot be ascertained; but, it was in the month of October, that the plant flowered last year 1779; the bulbs having been received, from the collector for the Clapham collection, still at the Cape, in the spring of the same year. The treatment for this, appears to be the same as that necessary for most Cape bulbs; light sandy peat, a little warmth when approaching to flower; and to be removed from the pot afterwards.



Galaxia ováta.

by It. Anover No Hrights brings

PLATE XCV.

AMARYLLIS RADIATA.

Rayed Lily Daffodil.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spatha oblonga, obtufa, compressa, emarginata, marcescens.

COROLLA. Petala sex lanceolata.

Nectarium squamis sex, extra basin filamentorum, brevissimis.

STAMINA. Filamenta sex subulata. Antheræ oblongæ, incumbentes, assurgentes.

PISTILLUM. Germen inferum. Stylus filiformis, longitudine ferme et fitu staminum. Stigma trifidum, tenue.

Pericarpium. Capfula fubovata, trilocularis, trivalvis.

SEMINA plura.

EMPALEMENT. Sheath oblong, blunt, compressed, notched at the end, and withering.

BLOSSOM. Six lance-shaped petals.

Honey-cup, fix scales from the base of the threads, very short.

CHIVES. Six awl-shaped threads. Tips oblong, fixed sideways to the threads, and turned up at the end.

Pointal. Seed bud beneath. Shaft threadfhaped, almost the length and situation of the chives. Summit three-cleft, slender.

SEED-VESSEL. Capfule nearly egg-fhaped, three cells, three valves.

SEEDS many.

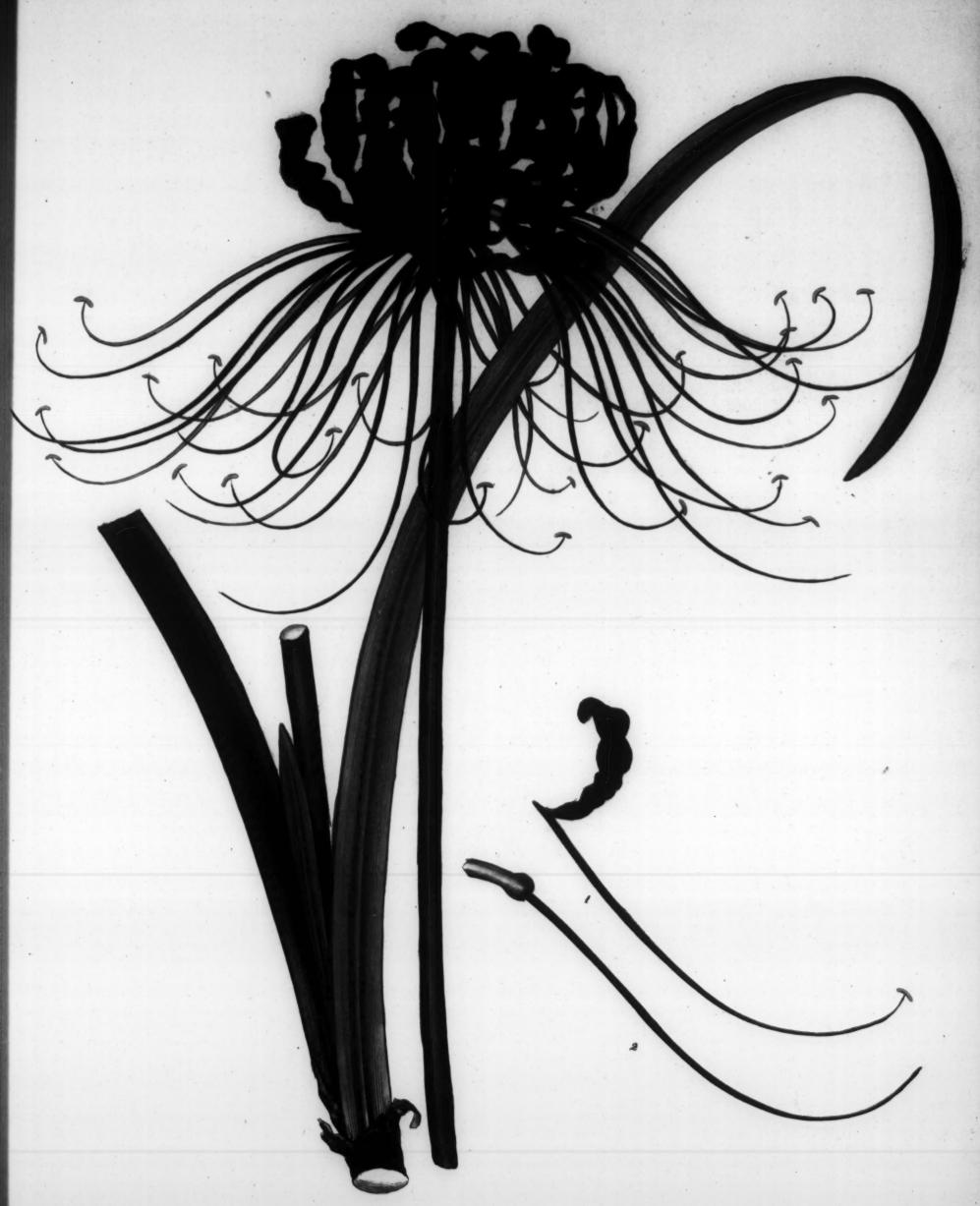
SPECIFIC CHARACTER.

Amaryllis fpatha multiflora; corollis revolutis, undulatis, lanceolatis; genitalibus deflexis, divergentibus, corolla triplo longioribus. Lily Daffodil, with many flowers in the fheath; bloffoms turned backward, waved and lance-fhaped; the parts of fructification are bent downward, fpread from the centre, and thrice the length of the bloffom.

REFERENCE TO THE PLATE.

- 1. A Petal, with the Chive attached.
- 2. The Pointal and Seed-bud, the Petals cut off.

This species of Lily, certainly not a novelty to many as a plant, is nevertheless in its blossom, to most, quite so; for, though sew collections are without it, yet we are pretty well assured, in no one has it flowered, at least for many years within the vicinity of London; except, in that of the Right Hon. the Marchioness of Rockingham, at Hillingdon near Uxbridge; for whose kind communication, (though personally unknown to her Ladyship,) of a most beautiful specimen, of which our figure conveys but a faint idea of the brilliancy; we can only thus, express our sincerest thanks. Mr. Greig, who had the goodness to bring the flower himself; informs us, the mode of his treating it is, to plant the bulbs in light sandy peat, and confine them to small pots, nearly half silled with broken tiles, and keep them on a shelf of the hothouse. It is a native of China, was introduced by the late Dr. Fothergill; and generally flowers, according to Mr. Greig, in the month of February, or March; and is increased abundantly from the root, by offsets.



Amaryllis radiata.

Soot a transfer where your -

PUNICA GRANATUM. Var. flore albo.

White Pomegranate.

CLASS XII. ORDER I. ICOSANDRIA MONOGYNIA. Twenty Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, campanulatum, quinquefidum, acutum, coloratum, perfiftens.

COROLLA. Petala quinque, subrotunda, erectopatentia, calyci inserta.

STAMINA. Filamenta numerofa, capillaria, calyce breviora, calyci inferta. Antheræ oblongiusculæ.

PISTILLUM. Germen inferum. Stylus fimplex, longitudine staminum. Stigma capitatum.

Pericarpium. Pomum subglobosum, magnum, coronatum calyce, novemloculare, dissipimentis membranaceis.

Semina plurima, angulata, succulenta. Receptaculum carnofum, fingulum loculamentum pericarpii bifariam dividens. EMPALEMENT. Cup one leaf, bell-shaped, fivecleft, pointed, coloured, and remaining.

BLOSSOM. Five petals, roundish, upright and spreading, atttached to the cup.

CHIVES. Threads numerous, hair like, shorter than the cup, and fixed to it. Tips nearly oblong.

POINTAL. Seed-bud beneath. Shaft fimple, the length of the chives. Summit a knob.

SEED VESSEL. A large and nearly round apple, crowned by the cup, five-celled, the partitions skinny.

SEEDS numerous, angulated, and juicy. Receptacle fleshy, and dividing each cell of the seed-vessel into two.

SPECIFIC CHARACTER.

Punica foliis lanceolatis, caule arboreo.

Pomegranate with lance-shaped leaves, and treelike stem.

DIFFERENCE IN VAR.

Punica Gra: Foliis majoribus, pallidioribus; floribus sub-albidis.

Pomegranate with larger and paler leaves; flowers nearly white.

REFERENCE TO THE PLATE.

- 1. A Flower cut open, to flew the infertion of the Petals and Chives, into the cup; with the fituation of the Pointal.
- 2. The same shewn from the reverse side.

This handsome variety of the common Pomegranate, (for it cannot be considered as a species,) will, it is to be hoped, prove an agreeable addition to our gardens; though not as a fruit tree, yet as an ornamental plant, of the middling hardy class. Indeed we have little doubt of this, if we may judge by analogy, from its deciduous character, or from its natural affinities; as the other forts of this species, viz. fingle red, double red, yellow flowered, and another new variety with large red bloffoms and larger leaves, all endure our winters, with little, or no protection, in the fouthern, or western counties of the island; and are all natives of the same clime: from whence, no doubt, they, like the Orange-tree, &c. &c. have been originally transported; though at present considered as indigenous, to all the different countries on the coasts of the Mediterranean sea, where the single red is cultivated for its fruit; the agreeable acidity of which, is confidered as a great luxury, in allaying the thirst occasioned by the intense heat, of those parching regions. In the month of April last year 1799, a fine branch, in full flower, was obligingly communicated by Lady Hume, from her felect collection at Wormley Bury, Herts; from which our figure was taken, and where it was then flowering for the first time in England. Her Ladyship had received the plant, amongst a number of others, from China, in the year 1796. The fruit did not ripen, which we attribute to its being kept in the hothouse, to which fituation, all plants coming from the East, are necessarily configned on their first importation. The mode of increasing it is certain and easy, by cuttings, or layers; and it grows most luxuriant in light earth, composed of rotten leaves or rotten dung, and light sandy loam.



Surica Granutum

Dut " to the Art directs Jame 1. 1000.

PLATE XCVII. VACCINIUM FORMOSUM.

Red-twigged Whortle-berry,

CLASS VIII. ORDER I. OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX fuperus. Corolla monopetala. Filamenta receptaculo inferta. Bacca quadrilocularis, polyfperma. Cur fuperior. Bloffom of one petal. Threads fixed to the receptacle. A berry with four cells, and many feeds.

See Vol. I. Pl. XXX. VACCINIUM ARCTOSTA-PHYLLUS.

SPECIFIC CHARACTER.

Vaccinium racemis pedicellisque bracteatis; foliis integerrimis, oblongis, acutis, glabris; calycibus adpressis; corollis sub-cylindraceis, costatis; stigma sub-exserta; stamina decem.

Whortle-berry with floral leaves on the branch part of the bunch, as well as on the partial foot-ftalks; leaves quite intire, oblong, pointed, and smooth; cups pressed to the blossom; blossoms nearly cylindrical, and ribbed; summit just without the blossom; ten chives.

REFERENCE TO THE PLATE.

1. The Bloffom and Cup.

2. The Chives and Pointal, magnified.

3. The Seed-bud a little advanced, with the Cup upon it.

4. A nearly ripe Berry, cut transversely, magnified.

FROM the number of different new and old known species, of this genus, which we have been enabled to examine this fpring; and of which drawings have been made, (a figure from one of them being intended to be given in each successive No. till they are finished;) we are more fully confirmed, in what was afferted in a former part of the work, that V. Arctoftaphyllus, with the greater part of those plants, now known as Vacciniums, should be placed in Decandria. It is true, a certain latitude has been given by Linnæus, in an observation on the genus, by allowing, that a fourth in addition to the usual number is frequently found, in the different parts of the flower. But when so effential a part of the fructification is, with a very few exceptions, constant through a numerous genus, we cannot but think, in a fystem, founded chiefly on that basis, that in such case, the mere character of the fruit should give way to first principles; and that those with ten chives should be placed to Andromeda. Or, if the distinction of a dry, from a moist capsule, should be thought of sufficient weight, on which to form a new genus, those species, with ten chives, and berries, might be so arranged. Indeed, the difference in the general habit, of those with ten, from those with eight chives, would well warrant such an alteration. But fuch a change we have declined making, upon the grounds we have, and are determined to purfue; not to alter any established name, if even a little erroneous; but only to point out the error, or the apparent necessary alteration.

This species of Whortle-berry was first introduced, (according to the Kew Catalogue,) in 1770, by Mr. William Young, from N. America; and is consequently hardy enough to bear the severity of our common winters. It should be planted in sandy peat earth, on a dry, sheltered border. It is propagated by layers, which should be put down in spring, and taken off the succeeding summer. The leaves of this species are deciduous, when planted in the open ground; but, if kept in the greenhouse, where it will be found very ornamental, it becomes an evergreen. Our figure was made at the nursery, Hammersmith, in May this year.



Vaccinium formasum

Si : asthe Het directs Judy heate.

PLATE XCVIII. PULTENÆA DAPHNOIDES.

Daphne-like Pultenæa.

CLASS X. ORDER I. DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, campanulatum, utrinque appendiculatum; ore quinquedentato, acuto.

COROLLA papilionacea, pentapetala.

Vexillum fub-cordatum, erectum.

Alæ oblongæ, vexillo breviores.

Carina dipetala, petalis alis conformibus.

STAMINA. Filamenta decem, diftincta, affurgentia, longitudine carinæ. Antheræ fimplices, minimæ.

PISTILLUM. Germen ovato-oblongum. Stylus fubulatus, magnitudine et fitu staminum. Stigma acutum, recurvatum.

Pericarpium. Legumen fubrotundum, apice mucronatum, uniloculare, bivalve.

SEMINA duo, fub-rotunda.

EMPALEMENT. Cup of one leaf, bell-shaped, having an appendage on each fide; the mouth five-toothed, sharp.

BLOSSOM. Butterfly-shaped, five petals.

Standard nearly heart-shaped, upright.

Wings oblong, shorter than the standard.

Keel two petals, which are like those of the

CHIVES. Ten threads, distinct, turned up at the ends, the length of the keel. Tips simple, very small.

POINTAL. Seed-bud oblong-egg-shaped. Shaft awl-shaped, the fize and fituation of the chives. Summit sharp-pointed and recurved.

SEED-VESSEL. Shell nearly round, with a sharp point on the end, of one cell and two valves. SEEDs two, roundish.

SPECIFIC CHARACTER.

Pultenæa foliis alternis, obovatis, glabris, mucronatis; floribus terminalibus, capitatis. Pultenæa with alternate leaves, inversely eggfhaped, smooth, with a sharp point at the ends; flowers terminate the branches growing in heads.

REFERENCE TO THE PLATE,

- 1. The Cup, with its two appendages, magnified.
- 2. The Standard of the Bloffom.
- 3. One of the Wings of the Bloffom.
- 4. The two Petals of the Keel.
- 5. The Chives and Pointal, natural fize.
- 6. The same, magnified.
- 7. The Pointal.
- 8. The same, magnified.
- 9. A half-ripe Seed-veffel, with the Cup remaining attached, magnified.

FROM the number of species of this genus of plants, already in Britain, we may conclude, that it is one of the most extended in New South Wales; twelve distinct ones have already flowered, drawings of most of them we have, which will be brought forward in due course. Dr. Smith, in the third No. of New Holland Botany, has named this tribe of plants after Dr. R. Pulteney, F. R. and F. L. S. of Blandford, Dorsetshire; well known for his Sketches of the Progress of Botany in England. But there is little doubt, that although no such kind attention as this of Dr. Smith had been shewn, to perpetuate the name of Dr. Pulteney, he had, by his excellent life of Linnæus, insured his own to live for ever. The Pultenæas, in systematic order, rank after, but very close to Sophora; but are little allied in general habit, as are few plants from that country to those of any other. This species was first raised in 1792, in many gardens about the metropolis the same year; but did not flower till 1796. It is a hardy greenhouse plant, generally flowering about the month of May; but the blossom is of short duration. Sandy peat is the soil it most approves; and its increase is produced, either from seeds, which sometimes ripen with us, or from cuttings placed in gentle heat about the month of May. The drawing was made from a plant in the Hibbertian collection at Clapham, this year.



Pultenna Daphnoides

PLATE XCIX.

GLADIOLUS BLANDUS.

Large White-flowered Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA, fexpartita, ringens. STAMINA adfcendentia. BLOSSOM, fix divisions, gaping.
CHIVES ascending.
See Plate XI. Vol. I. GLAD. ROSEUS.

SPECIFIC CHARACTER.

Gladiolus foliis lineari-lanceolatis, nervofis, glabris; floribus fpicatis, fecundis, albidis, maximis; laciniis tribus inferioribus maculatis; stigmatibus sub-bilobis. Gladiolus with linearly lance-shaped, strongly nerved, smooth leaves; slowers grow in spikes all from one side of the stem, white, and very large; the three lower segments of the limb are spotted; summits nearly two-lobed.

REFERENCE TO THE PLATE.

- 1. The Sheaths of the Empalement.
- 2. A Flower cut open, with the Chives attached.
- 3. The Seed-bud, Shaft, and Summits.

Or all the different species of so handsome a genus, no one is more defirable than this; as the root or plant is preserved with little care, and it rarely misses flowering; at the same time that the blossoms are of long duration, and not subject to injury from the weather; changing to a fine blush colour, when approaching to decay. From the Kew Catalogue we learn, that the G. Blandus was first introduced, from the Cape of Good Hope, by Mr. F. Masson in 1774. It thrives in most sorts of earth, but sandy peat seems the most proper for this, as well as most Cape bulbs. Our figure was taken from a plant in the collection of G. Hibbert, Esq. Clapham, this year, the end of May.



PLATE C. EMBOTHRIUM SERICEUM.

Silky Embothrium.

CLASS IV. ORDER I. TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

GENERIC CHARACTER.

CALYX nullus.

COROLLA. Petala quatuor, linearia, obliqua, apice latiore, fubrotundo, concavo, ftaminifero; post fœcundationem revoluta.

STAMINA. Filamenta quatuor, brevissima, in fingulo petala singula, vel nulla. Antheræ oblongæ, intra cavitatem petali sitæ, majufculæ.

PISTILLUM. Germen lineare, adfcendens, inflexum. Stylus nullus. Stigma fubrotundum, antice planum, postice concavum, magnum.

Pericarpium. Folliculus teres, unilocularis.

Semina quatuor seu quinque, ovata, compressa,
margine altero membrana alata.

SPECIFIC CHARACTER.

Embothrium foliis sub-ternatis, integerrimis, acutis, margine revolutis, subtus sericeis; spica recurva; fructu tuberculato, glabro.

EMPALEMENT none.

BLOSSOM. Four petals, linear, oblique; broad ended, roundish, concave, and supporting the chive; after the bursting of the tips they are rolled back.

CHIVES. Four threads, very short, one in each petal, or none. Tips oblong, placed in the hollow end of the petal, larger.

Pointal. Seed-bud linear, ascending, and bent. Shaft none. Summit nearly round, the forepart flat, the hinder concave, large.

SEED-VESSEL. A cylindrical pod of one cell.

SEEDs four or five, egg-shaped, flattened, having
a skinny wing at one edge.

Embothrium with leaves growing mostly three together, entire, pointed, rolled back at the edge, and filky beneath; spike bent downward; fruit tuberculated, not downy.

REFERENCE TO THE PLATE.

- 1. A Bloffom complete.
- 2. A Petal of the Bloffom, magnified.
- 3. The Seed-bud and Summit, magnified.
- 4. A ripe Seed-veffel.
- 5. A Seed.

When the figure of this plant, or a variety of it, was published by Dr. Smith, in the third No. of his New Holland Botany, it had not then flowered in England; and from the leaves only, of the dried specimens, it was scarce possible to trace, amongst such a variety of new faces, this species of Embothrium. It nevertheless was in many collections, and in some, all the varieties, although it had not then flowered in any. About the end of the year 1791 the seeds of this plant, with many others, were received by Messrs. Lee and Kennedy, of Hammersmith, transmitted to them from New South Wales, by Col. Paterson. As a hardy greenhouse plant, it will always be coveted, as it is seldom without flowers through the whole year. Our plant appears to differ sufficiently, from the three varieties given by the Doctor, to form a fourth; as the leaves on this are by no means constantly three together, but are often scattered. We have notwithstanding nearly copied his specific character. It should be planted in light sandy peat, and may be increased by cuttings, or by seeds, which occasionally ripen, whilst the plant is still in flower.



PLATE CI. HYPOXIS STELLATA.

Star-flowered Hypoxis.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Gluma bivalvis.

COROLLA monopetala, supera; limbus sexpartitus, laciniis ovato oblongis, patentibus; perfistens.

STAMINA. Filamenta fex, brevissima, capillaria.

Antheræ oblongæ, petalis breviores.

PISTILLUM. Germen inferum, turbinatum. Stylus filiformis, longitudine staminum. Stigma obtufiusculum.

Pericarpium. Capfula oblongiuscula, bafi angustior, coronata corolla persistente, trilocularis, trivalvis.

SEMINA plurima, fubrotunda.

EMPALEMENT. Husk of two valves.

BLOSSOM one petal, fuperior; border of fix divisions, fegments oblong-egg-shaped, and spreading; permanent.

CHIVES. Six very fhort hair-like threads. Tips oblong, shorter than the petals.

POINTAL. Seed-bud beneath, turban-shape. Shaft thread-shaped, the length of the chives. Summit bluntish.

SEED-VESSEL. Capfule rather oblong, fmaller at the base, crowned by the permanent blossom, three cells, three valves.

SEEDS many, roundish.

SPECIFIC CHARACTER.

Hypoxis scapo unifloro; foliis sub-linearibus, laxis, striatis; petalis basi maculatis.

Hypoxis with but one bloffom on the flowerftem; leaves nearly linear, flexible, and fcored; the petals spotted at the base.

REFERENCE TO THE PLATE.

- 1. The Chives and Pointal, cleared from the Bloffom.
- 2. A Chive.
- 3. The Pointal.

Though we have little doubt in referring this plant to the title under which we have figured it, and by which it has been long known to most botanists, at least by name; yet have we great ones, whether it ought in any wise to be considered as such. Thunberg, perhaps the only botanist, who has seen it in slower, thought so, and placed it to a genus he had named Fabricia. Certainly no one character of the genus Hypoxis, can be traced in the flower. The husk is of one valve, the petals not even close at the base, the threads flat, the summits three, and halbert-shaped, the shaft pillar-shape and short, &c. But, as upon our old plea, we do not choose to change generic names when long established, this plant, for us, must still remain an Hypoxis; tho it could not now be placed, at any rate, to Fabricia, as that title is given to a family of plants, natives of New Holland. The star-slowered Hypoxis is a native of the Cape of Good Hope, is rather a tender bulb, and does not often flower. It was according to the Kew Catalogue first introduced to the Royal Gardens by Mr. F. Masson, in the year 1788; but as the time of flowering is not mentioned, we suppose it did not flower there. The root should, like other Cape bulbs, be removed from the pot after flowering, and replanted in October. It propagates itself pretty freely by offsets, if planted in light sandy peat, mixed with a little loam. The drawing was made in June, this present year, at the Hammersmith nursery.

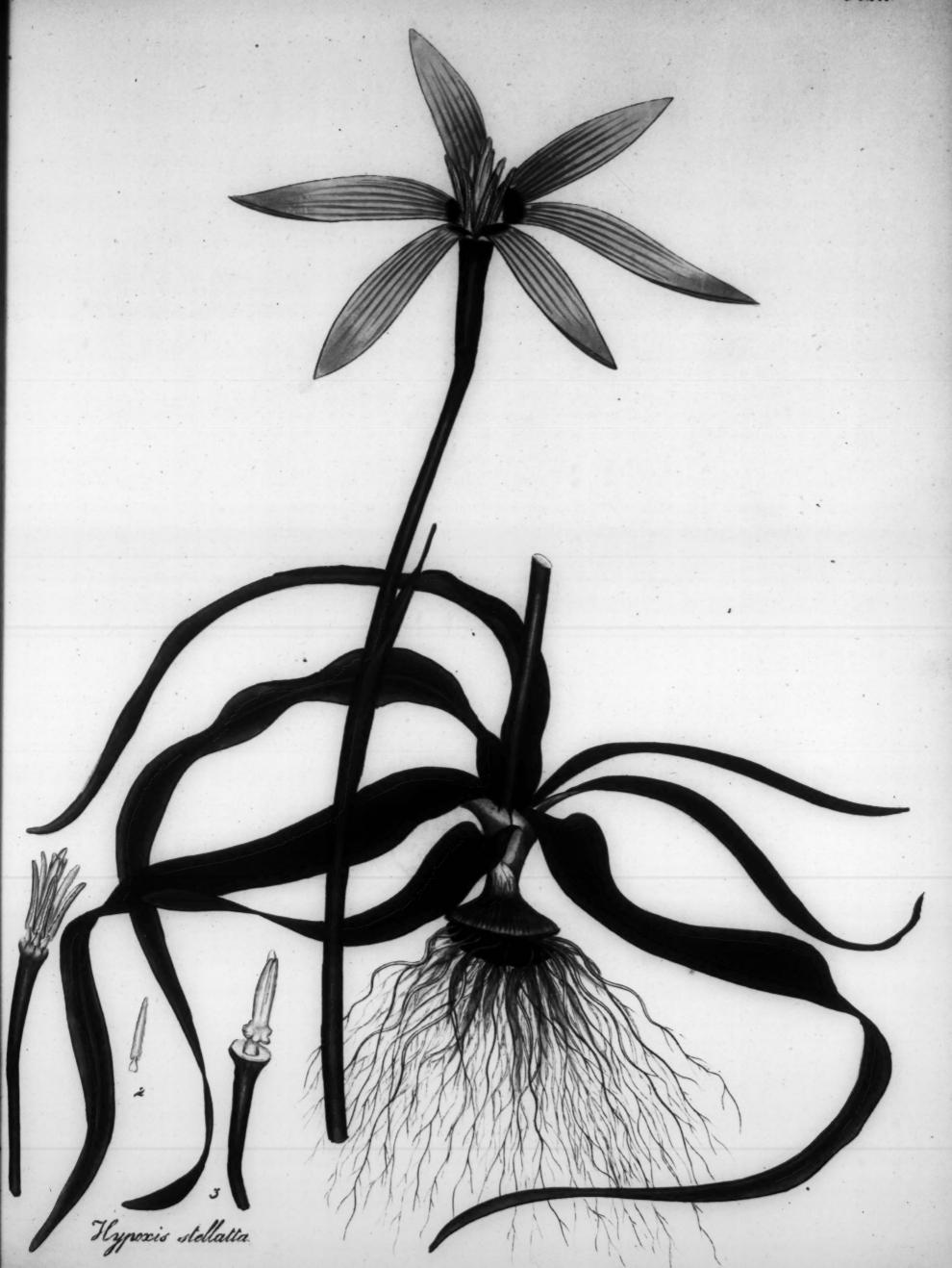


PLATE CII. EPIGÆA REPENS.

Creeping Epigæa.

CLASS X. ORDER I. One Pointal. DECANDRIA MONOGYNIA. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium duplex, approximatum, perfiftens.

P. exterius triphyllum; foliolis ovato-lanceolatis, acuminatis; exteriore majore.

P. interius quinquepartitum, erectum, exteriore paulo longius; foliolis lanceolatis, acuminatis.

COROLLA monopetala, hypocrateriformis; tubus cylindricus, intus hirfutus; limbus patens, quinquepartitus, lobis ovato-oblongis.

STAMINA, Filamenta decem, filiformia, longitudine tubi. Antheræ oblongæ, acutæ.

PISTILLUM. Germen globofum, villofum. Stylus filiformis, longitudine staminum. Stigma obtusum, subquinquesidum.

Pericarpium. Capfula fub-globofa, depressa, pentagona, quinquelocularis, quinquevalvis. SEMINA plurima, fubrotunda.

Receptaculum magnum quinquepartitum.

EMPALEMENT. Cup double, close together, and remaining.

> Outer cup three-leaved; leaflets between lance and egg-shape, pointed; the outer one the largest.

> Inner cup of five divisions, upright, a little longer than the outer; leaflets lance-shaped and pointed.

BLOSSOM one petal, falver-shaped; tube cylindrical, hairy within; the border spreading with five divisions, the fegments of an oblong egg-shape.

CHIVES. Ten thread-shaped threads the length of the tube. Tips oblong, and tapered.

POINTAL. Seed-bud globular and hairy. Shaft thread-shaped, the length of the chives. Summit blunt, and flightly five-cleft.

SEED-VESSEL. Capfule nearly globular, flattened, five-fided, five cells, and five valves.

SEEDS many, roundish.

Receptacle large, of five divisions.

CHARACTER. SPECIFIC

Epigæa caulibus procumbentibus; foliis cordatoovatis, integerrimis, reticulatis; corollis hypocrateriformibus.

Epigæa with stems that lay on the earth; leaves between heart and egg-shape, quite entire, and netted; bloffoms falver-shaped.

REFERENCE TO THE PLATE.

- 1. The two Cups of the Empalement.
- 2. The inner Cup, disengaged from the outer.
- 3. A Blossom cut open, to shew its hairy interior.
- 4. The Chives and Pointal, as they fland in the Bloffom.
- 5. The Pointal, (magnified).

THE Creeping Epigæa is the only species of the genus yet in Britain; it was first introduced by P. Collinson, Esq. in 1736, from N. America; where it is found in most parts, from Virginia, as far north as Canada. The flowers of this plant are extremely fragrant, and are produced from March till May. Hitherto, very few fituations have been found congenial to its cultivation, or growth; indeed, fo subject is it to perish from the moisture, or changeableness of atmosphere in our winter months, to which it is not subject in its native clime, being during that season covered with a deep snow; that unless an occasional supply had not been procured from America, the plant must, long ere this, have been lost to The foil which appears best adapted for its preservation, is a light sandy loam: if planted in the open air, it should have a sheltered fituation, on a dry border; but the most likely mode to preserve it, is by keeping it as a greenhouse plant. It is with difficulty increased by cuttings, but may be divided at the root, with fuccess, in March. Our figure was made at the nursery of Mess. Lee and Kennedy, Hammersmith, this year, in the month of April.

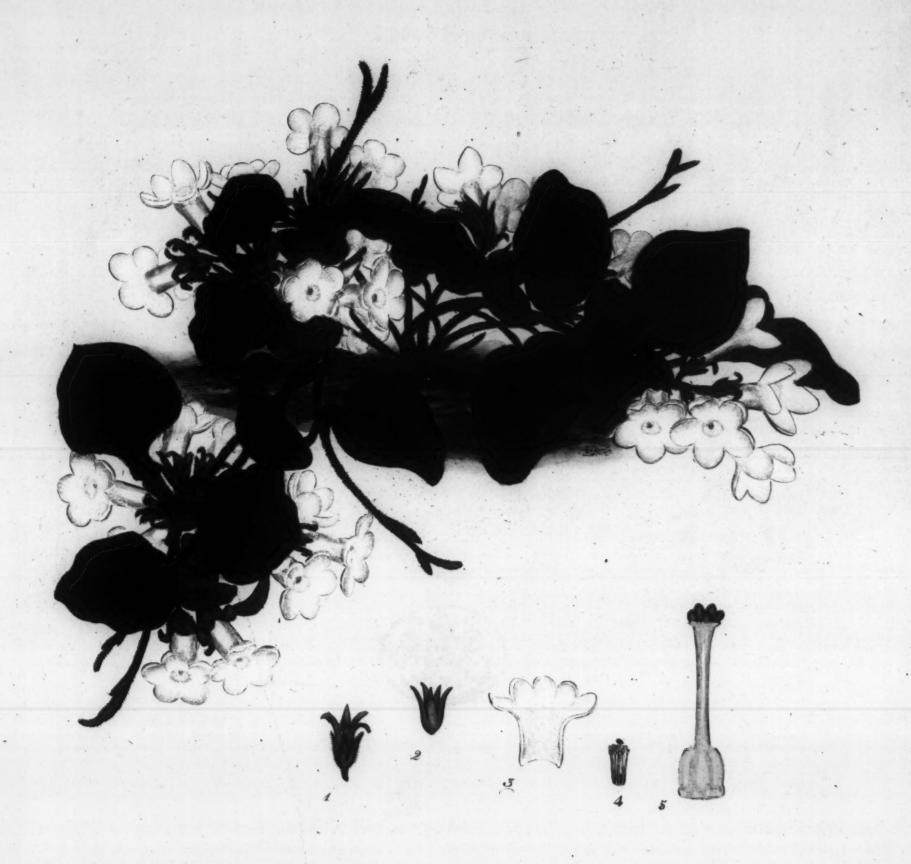


PLATE CIII.

PROTEA SPECIOSA, nigra

Black-flowered Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida, seu 4-petala. Antheræ line- | BLOSSOM 4-cleft, or of 4 petals. Tips linear, ares, infertæ petalis infra apicem. Calyx proprius, nullus. Sem. folitaria.

inferted into the petals below the points. Cup proper, none. Seeds folitary. See PROTEA FORMOSA, Vol. I. Plate XVII.

SPECIFIC CHARACTER.

Protea foliis longis, lineari-lanceolatis; fquamæ calycinæ interiores apice incurvatæ, barbatæ, nigræ.

Protea with long leaves, between linear and lance-shaped; the inner scales of the empalement are turned inward at the end, bearded, and black.

REFERENCE TO THE PLATE.

- 1. A Bloffom complete, as it flands in the Empalement.
- 2. The four Petals of the Flower thrown open, to shew the situation and character of the tips.
- 3. The Seed-bud, Shaft, and Summit.

IT is to the curious and beautiful structure of the empalement, (the flowers being nearly concealed within it,) that this species of Protea owes its specific title, and for which it is so much admired. There are different varieties of it, which are confidered by Thunberg, in his Diff. de Prot. of 1781, as diffinct species; but which are certainly only varieties of one stock: we have drawings of two of these, the one flesh-coloured, the other white; and hope to be able to demonstrate as just, our postulatum, when the fynonims are given, as proposed, at the close of this volume. This plant was first introduced to the Royal Gardens at Kew, from the Cape of Good Hope, in 1786, by Mr. F. Masson: it flowers at a very early age, and when the stem is not more than two feet high, mostly from the centre or leading branch of the plant. It is propagated by cuttings, which should be put in about the end of May, three or four, at most, in a pot, filled with good stiff loam, which should be pressed hard to the lower end of the cuttings, and the pot placed under a hand-glass in the shade. When the plants are to be removed into separate pots, it will be necessary to add a small portion of peat earth to the loam, and place them in an airy and dry part of the greenhouse. These directions are necessary to be observed, in the culture of nearly every species of this extended genus. Our figure was taken in the month of July 1799, from a plant in the Hibbertian collection, Clapham-common.



PLATE CIV.

LACHNÆA ERIOCEPHALA.

Woolly-headed Lachnæa.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, perfistens; tubo longo, tenui; limbo quadripartito, inæquali; lacinia summa retrofracta, minima; laciniis reliquis tribus erectis; intermedia majore.

COROLLA nulla.

STAMINA. Filamenta octo capillaria, erecta, longitudine ferme floris. Antheræ fimplices.

PISTILLUM. Germen ovatum. Stylus filiformis, germinis lateri infertus. Stigma capitatum, hispidum.

Pericarpium nullum. Fructus in fundo calycis.

SEMEN unicum, ovatum.

EMPALEMENT. Cup one leaf, remaining; tube long, flender; border of four divisions, unequal; the upper fegment appearing broke back, and small; the three other fegments are upright; the middle one the largest.

BLOSSOM none.

CHIVES. Eight hair-like threads, upright, almost the length of the flower. Tips fimple.

Pointal. Seed-bud egg-shaped. Shaft threadshaped, fixed into the fide of the seed-bud. Summit a hairy knob.

SEED-VESSEL none. The fruit is in the bottom of the cup.

SEED one, egg-shaped.

SPECIFIC CHARACTER.

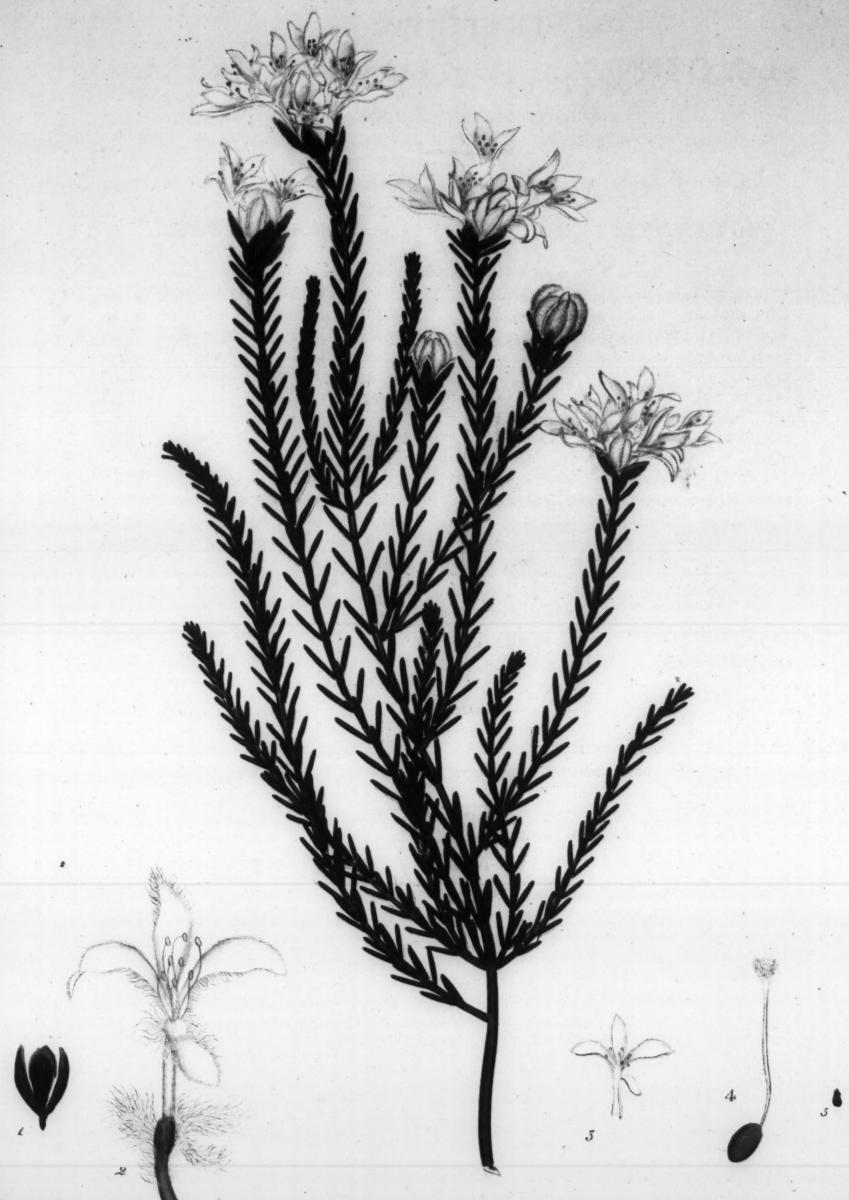
Lachnæa capitulis folitariis, lanatis; foliis quadrifariam imbricatis.

Lachnæa with little bunches of flowers growing folitary and woolly; leaves are tiled on the stem, forming four regular angles.

REFERENCE TO THE PLATE.

- 1. The terminating Leaves of the branches, which inclose the small heads of flowers.
- 2. A Flower, magnified.
- 3. A Flower cut open, natural fize, to shew the insertion of the Chives.
- 4. The Seed-bud and Pointal, magnified.

The figure of this curious new plant was taken from a specimen most obligingly communicated by the Hon. Wm. Hen. Irby, from his valuable and extensive collection at the Parsonage, Farnham Royal, near Windsor, Bucks. The genus Lachnæa has hitherto, with us, remained in obscurity; as the L. Conglomerata has not as yet flowered, and the L. Eriocephala was not in our collections till within these five years; about which time it was introduced by Mess. Lee and Kennedy, Hammersmith, from the Cape of Good Hope. It differs but little in habit from Passerina Grandislora, and until it flowered this year, was considered as a variety of that plant. May be propagated with ease by cuttings, and continues to flower from March till August. A mixture of peat and loam is the soil it most approves; but it is very susceptible of damps.



achna a Criocephala.

PLATE CV.

VACCINIUM CRASSIFOLIUM.

Thick-leaved Whortle-berry.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX fuperus. Corolla monopetala. Filamenta receptaculo inferta. Bacca quadrilocularis, polyfperma. Cup superior. Blossom of one petal. Threads fixed to the receptacle. A berry with four cells, and many feeds.

See Vol. I. Pl. XXX. VACCINIUM ARCTOSTA-

SPECIFIC CHARACTER.

Vaccinium foliis ovatis, ferratis, rigidis, craftiusculis; floribus sub-umbellatis, terminalibus; calycibus adpressis; corollis campanulatis; stamina decem. Whortle-berry with oval leaves fawed at the edges, stiff, and thickish; flowers grow nearly in umbels, at the end of the branches; cups pressed to the blossom; blossoms bell-shaped; ten chives.

REFERENCE TO THE PLATE.

- 1. Cup and Seed-bud, natural fize.
- 2. A Bloffom cut open.
- 3. The Chives and Seed-bud, the leaflets of the cup cut off, magnified.
- 4. The Pointal, magnified.

This species of Whortle-berry was introduced from Carolina, about the year 1794, by Mr. J. Fraser, nurseryman. It is another of those with ten chives, five cells in the berry, and five segments in the borders of the cup and blossom. It is an evergreen, and will live through a mild winter, on a warm border; but cannot resist the cold of a severe one, though a small degree of protection is sufficient for its preservation. As a greenhouse plant, it is very decorative, flowering about June; in which month this year our drawing was made, at the Hammersmith nursery, from a plant in that collection. The pabulum best calculated to preserve it in a flourishing state, is a mixture composed of sandy peat two parts, and light loam one part. To propagate it, the younger branches should be laid down about the end of May, and they will be rooted by the ensuing spring.



Vaccinium

HOUSTONIA COCCINEA.

Scarlet Houstonia.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium minimum, quadridentatum, erectum, perfistens.

COROLLA monopetala, infundibuliformis; tubus cylindraceus, longus; limbus quadripartitus, patens, laciniis fubrotundis.

STAMINA. Filamenta quatuor, in collo corollæ, minima. Antheræ fimplices.

PISTILLUM. Germen superum, subrotundum, compressum. Stylus simplex, staminibus brevior. Stigma bisidum, acutum.

Pericarpium. Capfula fubrotunda, didyma, fupra transverse dehiscens, bilocularis, bivalvis; valvulis dissepimento oppositis.

Semina pauca, parva, ovata, diffepimento adhærentia. EMPALEMENT. Cup very small, with four teeth, upright, and remaining.

BLOSSOM one petal, funnel-shaped; tube cylindrical, long; border of four divisions, spreading, segments roundish.

CHIVES. Four threads, fixed to the neck of the bloffom, very fmall. Tips fimple.

POINTAL. Seed-bud above, roundish, and flattened. Shaft simple, shorter than the chives. Summit split in two and sharp.

SEED-VESSEL. Capfule roundish, double, splitting transversely from the upper part, two cells, two valves; the valves opposite to the partition.

SEEDs a few, fmall, oval, adhering to the parti-

SPECIFIC CHARACTER.

Houstonia foliis ovatis, glabris, subternis; caulis debilis, suffruticosus; floribus terminalibus, coccineis.

Houstonia with oval, smooth leaves, growing mostly by threes; stem weak, rather shrubby; slowers terminate the branches, and are scarlet.

REFERENCE TO THE PLATE.

- 1. The Empalement and Pointal, the Bloffom taken off.
- 2. The Bloffom cut open, to flew its interior structure.
- 3. The Seed-bud and Pointal, the leaflets of the cup being removed, magnified.

The Houstonia coccinea has been placed, by some late botanical authors, under the genus Hedyotis; but such authorities can have no weight with us, when opposed to an established name, a nearly general conformity in the essential generic characters; and though last, not the least in our estimation, the corroborating testimony of Sir J. Banks, Bart. P. R. S. &c. by whom it was sent to the Royal Gardens, Kew, in 1793. It is a native of Mexico, South America; and like the Hememerises,* Fuchsias, Chelones, &c. of that country, is very subject to damp; but being partly herbaceous, the root is most frequently preserved, although the upper part has perished. Though it requires the protection of a greenhouse in winter, it may be made an ornamental plant for the flower borders in autumn, by putting single cuttings, in small pots filled with rich earth, into the heat of a hotbed, early in March, they will be fit to transplant into the open ground the latter end of June, and will flower about August, continuing to blossom till destroyed by the frost; or if taken up and put into large pots, will flower till Christmas. Our figure was taken from a beautiful plant, in the collection of R. H. James, Esq. Grosvenor-place, in 1799.

These are the two species of an old genus, introduced into the Bot. Mag. of Curtis, under the titles of Celsia liniaris and C. urticifolia.

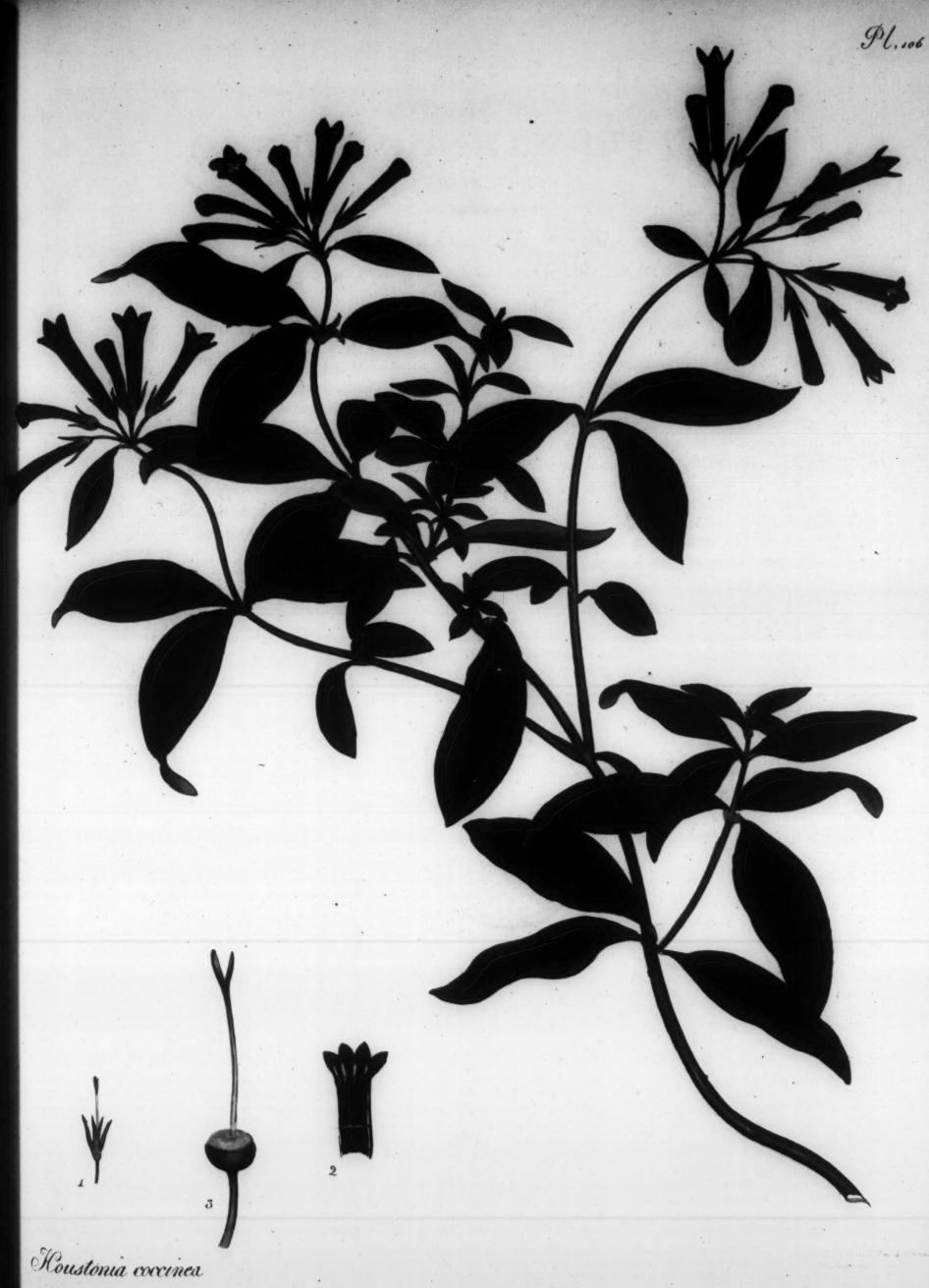


PLATE CVII. ALLIUM GRACILE.

Sweet-scented Garlic.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spatha communis, fubrotunda, marcescens, multiflora.

COROLLA. Petala fex, oblonga.

STAMINA. Filamenta fex, fubulata, longitudine fæpe corollæ. Antheræ oblongæ, erectæ.

PISTILLUM. Germen superum, breve, subtrigonum, angulis linea insculptis. Stylus simplex. Stigma acutum.

Pericarpium. Capfula breviffima, lata, triloba, trilocularis, trivalvis.

SEMINA pauca, fubrotunda.

EMPALEMENT. Spath common, roundish, withering, inclosing many flowers.

BLOSSOM. Petals fix, oblong.

CHIVES. Six threads, awl-shaped, often the length of the blossom. Tips oblong, upright.

Pointal. Seed-bud above, short, nearly threefided, the angles marked by a line. Shaft simple. Summit pointed.

SEED-VESSEL. Capfule very fhort, broad, of three . lobes, three cells, and three valves.

SEEDS a few, roundish.

SPECIFIC CHARACTER.

Allium scapo nudo, tereti, longissimo; foliis canaliculatis, linearibus; umbella multissora; corollis albidis; staminibus subulatis, ad basin cum petalis desinentibus in tubum. Garlic with a naked flower-stem, cylindrical, and very long; leaves channelled, and linear; umbel many flowered; blossoms white; chives awl-shaped, terminating with the petals at the base in a tube.

REFERENCE TO THE PLATE.

- 1. The Bloffom cut open.
- 2. One Petal of the Bloffom and its Chive, magnified.
- 3. The Pointal and Seed-bud.
- 4. A Capfule with ripe Seeds.

FROM a plant in the collection of J. Vere, Efq. Kenfington Gore, our drawing was made, this year, early in the month of May; and from an accurate ferutiny, are inclined to think it might be confidered as a new genus; for certainly it does not well affine to the one here affigned it, in feveral inftances; but as our professed principles are, as rarely as possible, to increase the number of genera, we have retained it under Allium. The flowers of this plant are fragrant in the extreme, at night; so much so, that one is sufficient to seen a large room; the flavour something like the Heliotrope. Being a native of Barbadoes, from whence it was sent by Mr. J. Ellcock in 1791, to Messrs. Lee and Kennedy, Hammersmith, it requires the heat of a hothouse, where, without the assistance of the bark bed, it will flower, and increase from the bulb abundantly.

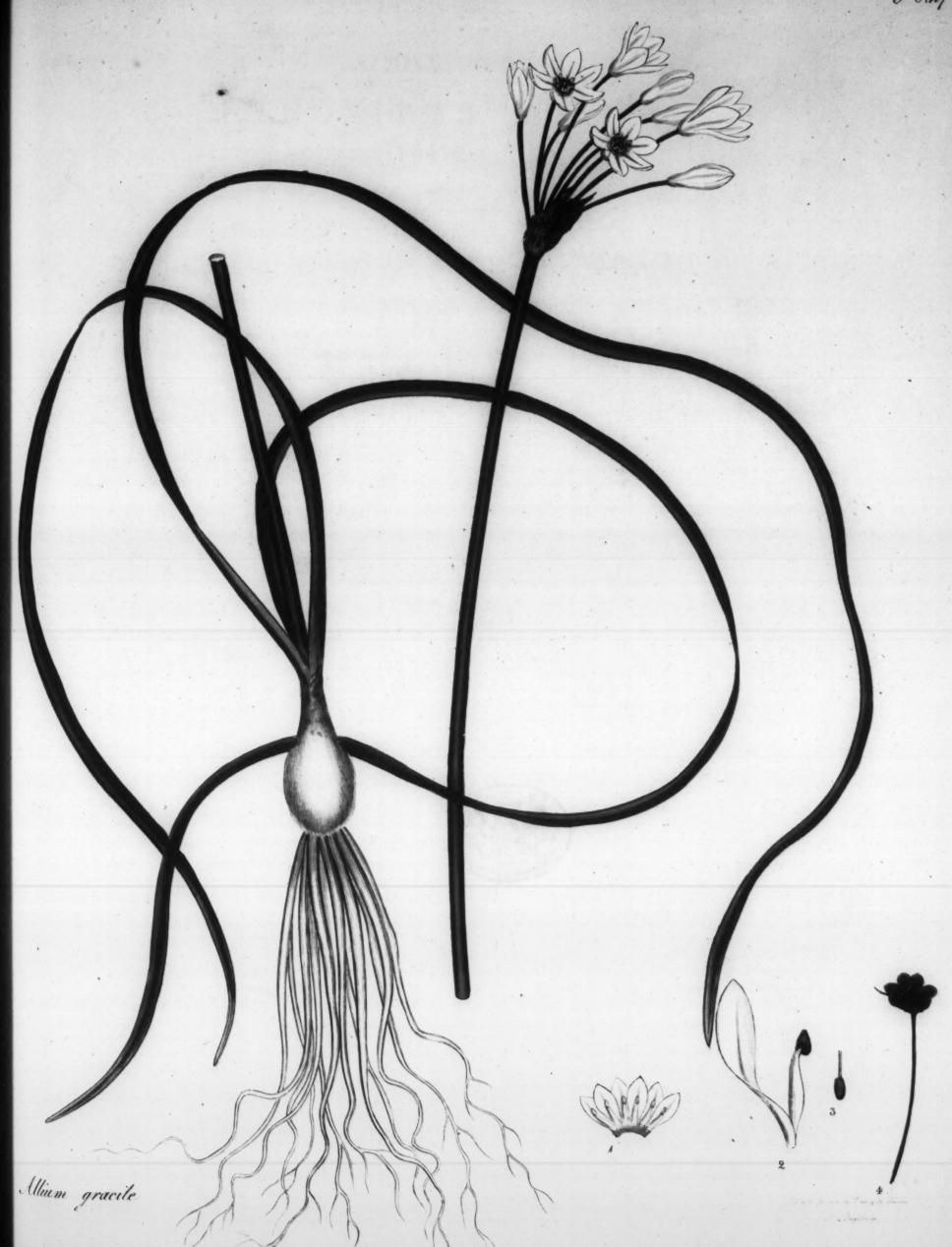


PLATE CVIII.

GERANIUM RENIFORME.

Kidney-shape-leaved Geranium.

CLASS XVI. ORDER IV.

Of Suppl. System. Veget. 1781.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. Fructus roftratus, penta-coccus.

One Pointal. Five Summits.

FRUIT furnished with long awns, five dry berries.

See Geranium Grandiflorum. Pl.XII. Vol. I.

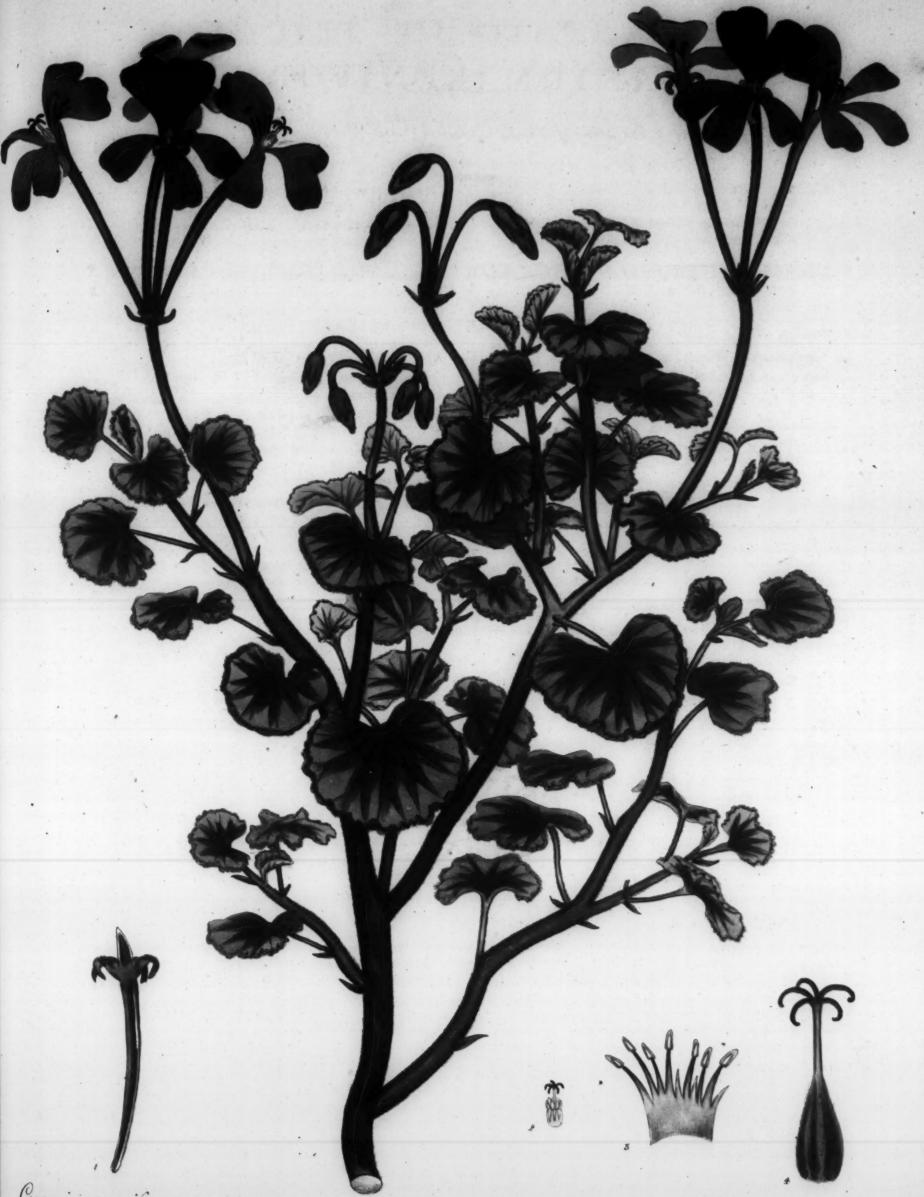
SPECIFIC CHARACTER.

Geranium foliis reniformibus, crenato-dentatis, tomentofis; floribus heptandris, fubquaternis, purpureis; caule fruticofo, fub-carnofo. Geranium with kidney-shaped leaves, between fcolloped and toothed at the edges, and downy; flowers with seven fertile tips, grow mostly by fours, and are purple; stem shrubby, and almost sleshy.

REFERENCE TO THE PLATE.

- 1. The Empalement cut open, to shew its hollow structure.
- 2. The Chives and Pointal, natural fize.
- 3. The Threads cut open, to shew their number, as well as the general number of fertile tips, magnified.
- 4. The Pointal and Seed-buds, magnified.

FROM the Hort. Cantab. published this year, by the accurate Mr. J. Donn, we learn that this fine species of Geranium was introduced to the Royal Gardens, Kew, about nine years fince; yet, till within these two years, it has not been seen in any other collection. Our drawing was made in July 1799, from a plant in the Clapham collection. This Geranium must be treated rather as a dry-stove than as a common greenhouse plant, for it affines much to G. Fulgidum, and a few others, which are inhabitants of the sandy deserts of the more interior parts of Africa, and which require more heat than is proper for those from Table Mountain, or the vicinity of the Cape. It is propagated by cuttings made about the month of March, and placed under a small glass, either in a hotbed, or in the bark bed of the hothouse: it may be increased by the root likewise, and from seed which is sometimes perfected. A compost of cow dung, at least two years old, one part, sea sand one part, and light loam two parts, is the most proper for many of the tenderer sorts of this genus.



Geranium reniforme

Reblied as the Il Gent Sypt to Good by Ho Anciens & Highliberty

CHRYSANTHEMUM TRICOLOR.

Three-coloured Corn-Marygold.

CLASS XIX. ORDER II.

SYNGENESIA, POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

GENERIC CHARACTER.

CALYX. Communis hæmisphæricus, imbricatus; fquamis arcte incumbentibus; interioribus per gradus majoribus, margine scariosis; intimis terminatis squama scariosa.

COROLLA. Composita radiata. Corullulæ hermaphroditæ tubulosæ, numerosæ, in disco; femineæ duodenis plures, in radio.

Propria hermaphroditis infundibuliformis, quinquefida, patula, longitudine calycis.

Femineis ligulata, oblonga, tridentata.

STAMINA. Hermaphroditis filamenta quinque, capillaria, brevissima. Anthera cylindracea, tubulosa, corolla fere brevior.

Pistillum. Hermaphroditis, germen ovatum. Stylus filiformis, ftaminibus longior. Stigmata duo, revoluta.

Femineis germen ovatum. Stylus filiformis, cum hermaphroditis æqualis. Stigmata duo, obtufa, revoluta.

Pericarpium nullum. Calyx immutatus.
Semina. Hermaphroditis folitaria, oblonga.
Pappus nullus.
Femineis fimillima hermaphroditis.

RECEPTACULUM nudum, punctatum, convexum.

EMPALEMENT. Common, hemispherical, tiled; feales lying close upon each other; the inner ones becoming gradually larger, skinny at the edge; the innermost terminating in a skinny substance.

fkinny substance.

Blossom. Compound radiate. Florets with chives and pointals, of the centre, tubular and numerous; those with only pointals, of the ray, twelve or more.

Individuals with chives and pointals, funnel-shaped, five-cleft, open, the length of the cup.

Individuals with only pointals, ligulate, oblong, with three teeth.

CHIVES. Those with chives and pointals have five, hair like, very short threads. Tips cylindrical and tubular, scarcely shorter than the blossom.

Pointal. Seed-bud, where there are chives and pointals egg-fhaped. Shaft thread-fhaped, longer than the chives. Summits two, rolled back.

Seed-bud where there are only pointals egg-shaped. Shaft thread-shaped the length of those where there are chives and pointals Summits two, blunt and rolled back.

SEED-VESSEL none. Cup unchanged.

Seeds of those with chives and pointals solitary, oblong. Feather none.

Those where there are only pointals like

the others.

RECEPTACLE naked, dotted, and convex.

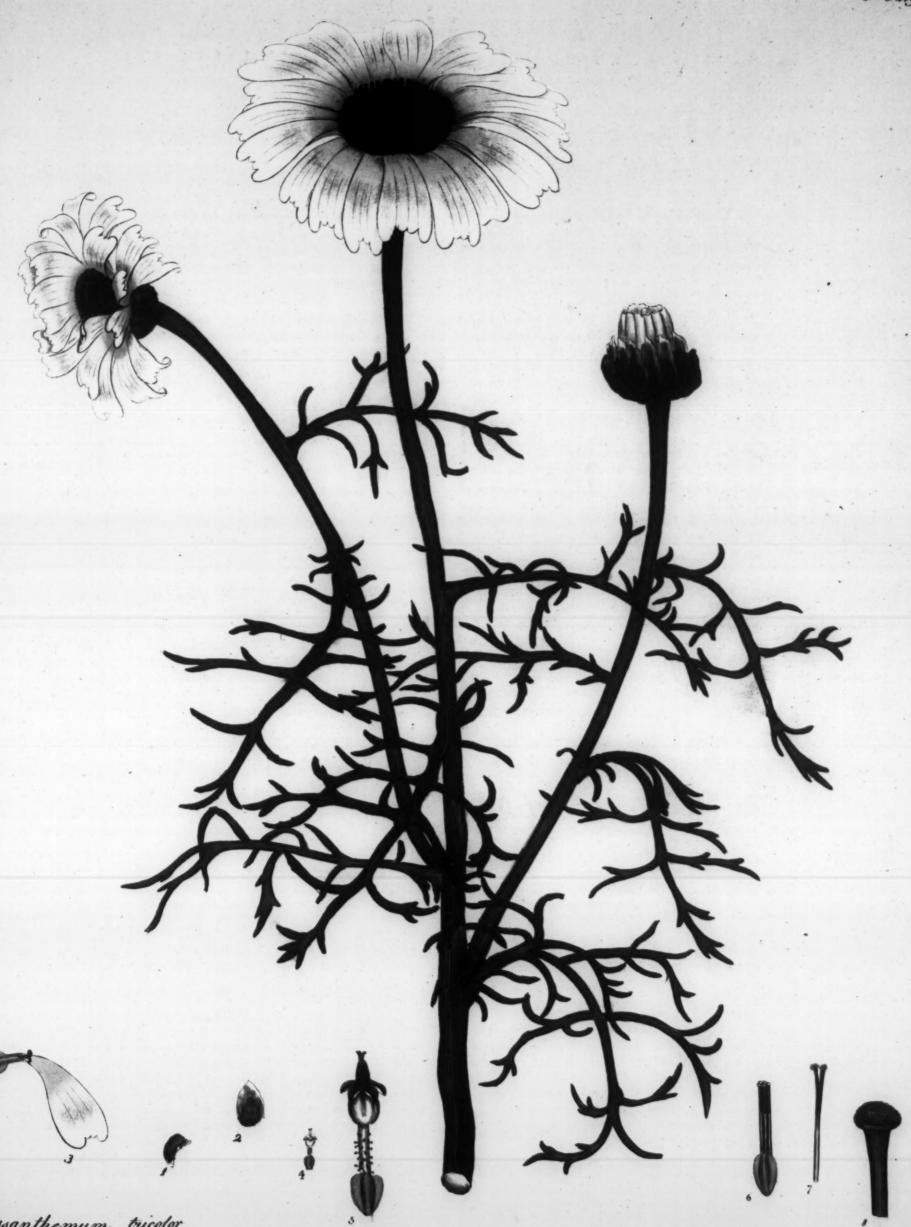
SPECIFIC CHARACTER.

Chrysanthemum crithmi foliis; squamis exterioribus calycis carinatis; floribus solitariis, tricoloratis. Corn-Marygold with famphire-like leaves; the outer scales of the cup keel-shaped; the flowers grow solitary and are three-coloured.

REFERENCE TO THE PLATE.

- 1. An outer Scale of the Empalement.
- 2. An inner Scale of the Empalement.
- 3. A female Floret of the Circumference, with its Pointal.
- 4. An hermaphrodite Floret of the Center.
- 5. The above, magnified.
- 6. The Chives of an hermaphrodite Floret, magnified.
- 7. The Pointal of an hermaphrodite Floret, magnified.
- 8. The Receptacle, natural fize.

Mr. James Donn, Curator of the Botanic Gardens, Cambridge, through whose medium we posses this new species of Crysanthemum, informs us, in his catalogue for 1800, that it is a native of the coast of Barbary, and from whence it was first received in 1797. The C. Tricolor is but of annual growth, should be raised on gentle heat about March, and may be either kept in pots, or planted in the open borders, where it will flower from July till October; but much of the brilliancy of the flowers will be lost, if treated in the last manner, as the least wet, or even the dew, will affect their colours. The seeds are persected in less than a week, after the decay of the flower, and are produced in abundance. Our figure was taken from a plant in the Hammersmith nursery, which had been raised from seed, communicated by Mr. Donn to Messrs. Lee and Kennedy.



Chrysanthemum tricolor

PLATE CX.

PROTEA SPECIOSA, latifolia.

Broad-leaved Shewy Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida, seu 4 petala. Antheræ lineares, insertæ petalis infra apicem. Calyx proprius, nullus. Semina solitaria.

BLOSSOM 4-cleft, or of 4 petals. Tips linear, inferted into the petals below the ends. Cup, proper, none. Seeds folitary.

See PROTEA FORMOSA, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis lanceolato-ovatis; squamæ calycinæ interiores barbatæ, apice incurvatæ, incarnatæ.

Protea with leaves between oval and lancefhaped; the inner scales of the empalement are bearded, turned inward at the ends, and flesh coloured.

REFERENCE TO THE PLATE.

- 1. A Bloffom complete, as it flands in the Empalement.
- 2. The same opened, to shew the situation of the Chives.
- 3. The Seed-bud and Pointal.

The drawing of this magnificent plant was made at the nursery of Messrs. Grimwood and Wykes, Kensington, this year, early in the month of August; as we were informed by Mr. Wykes it was then in flower for the first time in England. In the year 1786 it was sent, in seeds, to the royal gardens, Kew, by Mr. F. Masson, from the Cape of Good Hope; where certainly its beauty must be great; as, even there, amidst that world of beauties, it should be honoured with such a specific title; in which, considering it as only a variety of our P. speciosa nigra, we entirely agree with Willdenow; where the last synonim of that species, copied by him in his Sp. Pl. from Ray's Historia Plantarum of 1719, must have been taken from a plant of this variety. The treatment, and culture of this, and P. Speciosa nigra, are exact in every thing.

Pl, in totea speciosa lalifolia

PLATE CXI.

GLADIOLUS STRIATUS.

Streaked-flowered Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fexpartita, ringens. Stamina adfcendentia.

BLOSSOM fix divisions, gaping. Chives ascending.

See GLADIOLUS ROSBUS, Plate XI. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis lanceolato enfiformibus, scapo æquantibus; scapo subtrifloro, erecto; floribus erectis; corolla ringente, laciniis acutis, undulatis, medio striatis. Gladiolus with leaves between lance and fwordfhaped, the length of the flower-stem; generally three flowers on the stem; flowers grow upright; blossom gaping, the segments pointed, waved, and streaked in the middle.

REFERENCE TO THE PLATE.

- 1. The two Sheaths of the Empalement.
- 2. A Flower cut open with the Chives attached.
- 3. The Seed-bud and Pointal, natural fize, one Summit detached, magnified.

This species of Cape Gladiolus was brought to us, from Holland, about the year 1788; it is a very hardy bulb, the flowers continuing perfect more than a week, and are not easily injured either by wind or rain. But the greatest merit of this plant is, that the blossoms are only produced when most of the other species of Ixiæ, Gladioli, &c. have done flowering; which is generally about the end of July. Before the stem decays, the bulb should be taken from the pot, and dried. The increase of this plant is not great, as seldom more than two roots are produced from the old one. Our drawing was made at the Hammersmith nursery, in 1799. Willdenow has a Gladiolus from Jacquin's Icon. Rar. under the specific title here given to this, undoubtedly not the same plant; but as our name is that by which this species is in general known, and by which it came from Holland, we have not thought fit to alter it.



PLATE CXII.

VACCINIUM DUMOSUM.

Bushy Whortle-berry.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX fuperus. Corolla monopetala. Filamenta receptaculo inferta. Bacca quadrilocularis, polysperma. Cup superior. Blossom of one petal. Threads fixed to the receptacle. A Berry with four cells and many seeds.

See Vac. Arctostaphyllos, Pl.XXX. Vol. I.

SPECIFIC CHARACTER.

Vaccinium foliis ovatis, acutis, glabris; floribus folitariis, axillaribus; pedunculis longiffimis, bracteatis; corollis urceolatis subalbidis; stamina decem.

Whortle-berry with oval, pointed, smooth leaves; flowers grow solitary from the foot-stalk of the leaves, close to the stem; foot-stalks of the flowers are very long, having floral leaves; blossoms pitcher-shaped, nearly white; ten chives.

REFERENCE TO THE PLATE.

- 1. A Flower complete.
- 2. The Cup and its Foot-stalk, with the floral Leaves.
- 3. The Seed-bud, Pointal, and Chives.
- 4. The fame, magnified.
- 5. The Shaft and its Summit, magnified.

This species of Whortle-berry is a neat, compact, bushy shrub; and like all the rest of those which have ten chives, and the other parts consonant, can scarcely be considered as a hardy plant; for although it will live through a mild winter, if planted in a warm and dry situation, on an open border; yet it will in general be destroyed, by the severe frosts which happen late in spring. It should be planted in sandy peat earth, with a small portion of light loam; may be propagated by layers, which do not commonly root, sufficiently to be taken off, under two years from the time of their being put down. As a hardy green-house plant it is best preserved in a flourishing state, and will slower about the month of June; in which month, this year, our drawing was made, at the nursery of Messrs. Lee and Kennedy, by whom it was introduced from North America in the year 1783.



Vaccinium dumosum

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STRUTHIOLA IMBRICATA.

Tiled-leaved Struthiola.

CLASS IV. ORDER I. TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

GENERIC CHARACTER.

CALYX, nullus; nifi bracteas sub germine pro calyce assumas.

COROLLA monopetala, marcescens; tubus filiformis, elongatus; limbus quadripartitus, planus, tubo brevior; laciniis ovatis.

Nectarium, glandulæ quatuor, seu octo, ovatæ, fauci circumpositæ, penicillo proprio cinctæ.

STAMINA. Filamenta quatuor, brevissima, intra tubum ocultata. Antheræ lineares.

PISTILLUM. Germen ovatum. Stylus filiformis, longitudine tubi. Stigma capitatum, hispidum.

Pericarpium coriaceum, ovatum, uniloculare. Semen unicum, acutiusculum. EMPALEMENT, none; unless you take the floral leaves at the base of the seed-bud for the cup.

BLOSSOM one petal, withering; tube threadfhaped, lengthened; border of four divifions, flat, fhorter than the tube; fegments egg-shaped.

Honeycup, four or eight oval glands, placed round the mouth of the bloffom, each being furrounded by its brush of hairs.

CHIVES. Four threads, very short, hid within the tube. Tips linear.

POINTAL. Seed bud egg-shaped. Shaft thread-shaped, the length of the tube. Summit, a hairy knob.

SEED-VESSEL leathery, egg-shaped, of one cell. SEED one, a little pointed.

SPECIFIC CHARACTER.

Struthiola foliis ovato-acuminatis, concavis, imbricatis, glabris, margine ciliatis; glandulæ quatuor fupra faucem. Struthiola with oval leaves, tapering to a point, concave, tiled, fmooth, and hairy at the edges; four glands upon the mouth of the bloffom.

REFERENCE TO THE PLATE.

- 1. A Flower with its floral leaves, or cup.
- 2. The floral Leaves or Cup, magnified.
- 3. A Flower cut open, magnified.
- 4. The Seed-bud, Chives, and Pointal, magnified.

THE Genus Struthiola, from the few species yet known, has been but slightly considered. Linnæus, at the end of his Generic Character, affines it to Passerina; it is true, the habits of S. virgata, and S. erecta, which are undoubtedly only varieties of the same stock, and the only two he had seen, might lead to fuch a comment; but, from the seven species of which we have drawings, all taken from living plants, and which will be brought forward in due course, we consider them, as perfectly distinct, in more effential characters than merely the number of chives. The acute and diligent Willdenow, in his new edition of Sp. Plant. enumerates five species from Thunberg, &c.; but from his notes of observation, prefixed to each, he had not seen either living or dried specimens of any, but the two above named. The characters in which we observe this genus to differ from Gnidia and Passerina, are, first, a cup of two leaves, constant in every species we have examined, for they cannot be confidered as floral leaves, being attached to the base of the blossom, and joined together at the bottom; fecondly, the honeycup forming a complete cincure to the mouth of the flower, and upon which are feated, four, or eight, upright glands. This species of Struthiola was first raised in England, at the nursery, Hammersmith, from the Cape of Good Hope, in the year 1794. It is a tender green-house plant, and very subject to be destroyed by wet; therefore, should be protected from too much rain in fummer, and kept in an airy part of the house in winter. It is propagated by cuttings made in the month of May, or June, and should be planted in light, sandy peat, mixt with about one fixth part of loam. The flowers of this, as well as all the species we have seen, are extremely fragrant in the evening, beginning to fmell with the fetting fun, and continuing their flavour till morning. An agreeable peculiarity attendant on most plants of this natural order, and on every species of this genus, in particular, is, that they flower twice in the year, about the month of March, and again in September; in which month, last year, our drawing was made, from the Hibbertian collection, Clapham Common.



Southiola imbricata

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PLATE CXIV.

GERANIUM QUINQUEVULNERUM.

Variegated flowered Geranium.

CLASS XVI. ORDER IV.

Of Suppl. System. Veget. 1781.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. FRUCTUS roftratus, penta-coccus.

ONE POINTAL. Five fummits.

FRUIT furnished with long awns, five dry berries.

See Geranium Grandiflorum, Pl. XII. Vol. I.

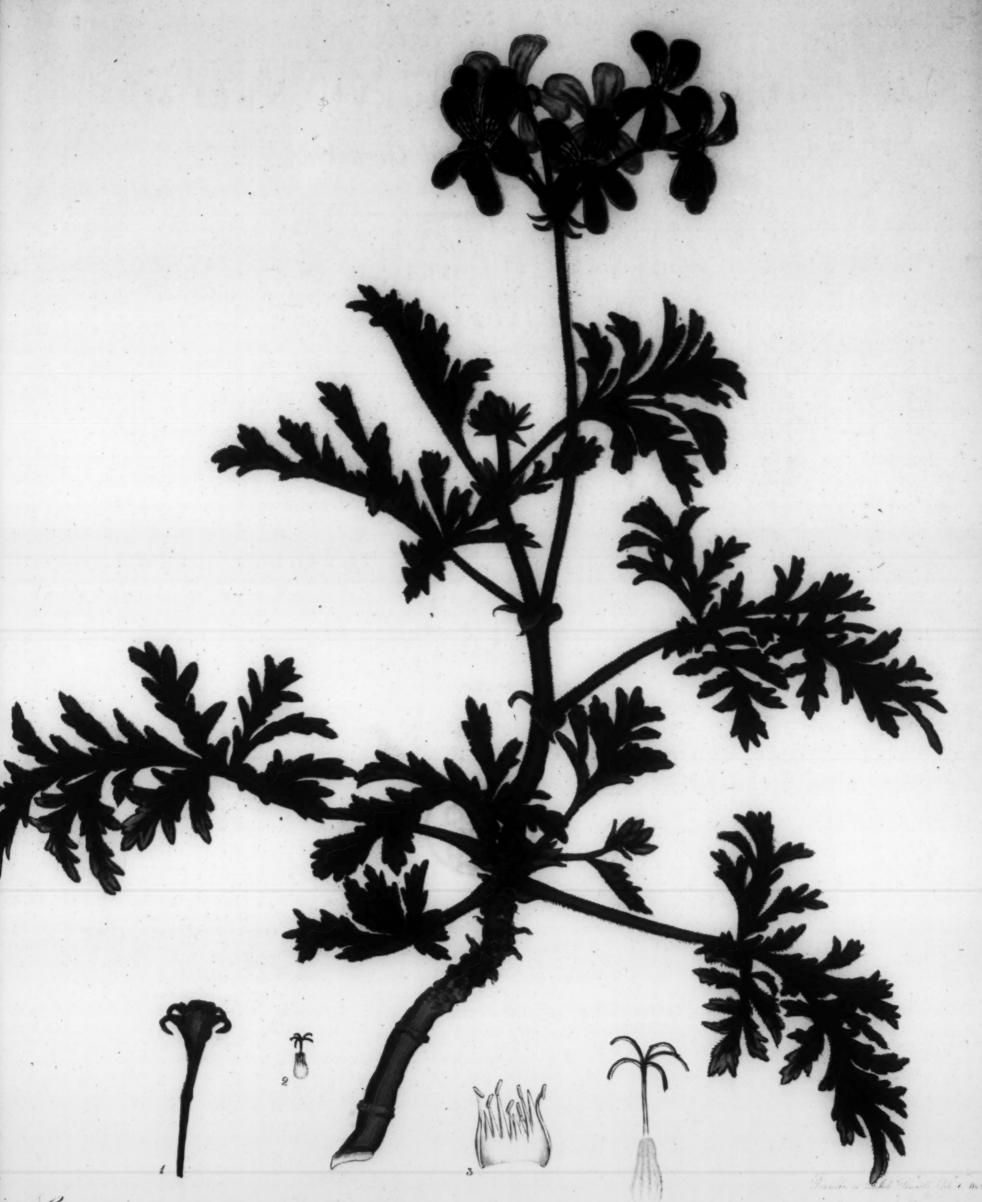
SPECIFIC CHARACTER.

Geranium foliis hispidis, multifidis; floribus heptandris; pedunculis multifloris; petala atropurpurea, margine pallido; caule suffruticoso, spithamæo. Geranium with hairy leaves many-cleft; flowers with feven fertile chives; foot-stalk, many flowers; petals dark purple, pale at the margin; stem half shrubby, grows a span high.

REPERENCE TO THE PLATE.

- 1. The Empalement, cut open as far as to the folid part.
- 2. The Chives and Pointal.
- 3. The Chives cut and spread open, magnified.
- 4. The Pointal, magnified.

This beautiful species of Geranium was raised by Mr. J. Armstrong, nurseryman of Northwarmborough, Hants, from seeds received by him, in 1796, from the Cape of Good Hope. From a branch, in fine flower, brought to us, this year, in the month of June, by Mr. Dickinson, our drawing was made; who informs us, that the ordinary treatment of common Geraniums, is all that is required for this; that it is increased by cuttings, or from a division of the root, in spring. It has not, as yet, produced any perfect seed; although it has flowered abundantly these two years, from May till October. It has something the habit of G. triste, or the Night-smelling Geranium; but differs from that species, in having a short shrubby stem, the leaves shorter and harsher, and the flowers entirely without smell.



Geranium quinquevulnerum

PLATE CXV.

GERANIUM TOMENTOSUM.

Downy-leaved Geranium.

CLASS XVI. ORDER IV. of Suppl. System. Veg. 1781.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

See Geran. Grandiflorum, Pl. XII. Vol. I.

ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. FRUCTUS roftratus, penta-coccus.

One POINTAL. Five Summits.

FRUIT furnished with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis ovatis, plicatis, erectis, ferratis, tomentofis; floribus pentandris; filamentis duobus fuperioribus revolutis, ciliatis. Geranium with egg-shaped leaves, plaited, upright, sawed, and downy; slowers with five fertile chives; the two upper threads rolled back and fringed.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. The Chives and Pointal, natural fize.
- 3. The Chives cut open, magnified.
- 4. The Pointal, and Seed-bud

The Downy-leaved Geranium, according to the Hort. Cantab. of Mr. Donn, introduced from the Cape of Good Hope, in the year 1794; is a dwarf growing, and rather delicate species, of this extended and very mutable tribe of plants; producing its flowers about the month of August. It is to be increased from the seeds, which sometimes ripen; or by cuttings, taken off in the month of March, and placed on a gentle hotbed; but if delayed to be made till much later, it will be found difficult to propagate by this mode. Less of dung and more loam, than is necessary for most Geraniums, will preserve this plant best through the winter; in which season, it should be kept in a dry and airy part of the greenhouse, to avoid the damps, which otherwise, often prove fatal to it.

That the charm of novelty, however erroneous or abfurd, has found at all times its votaries, we have daily experience; therefore cannot wonder at, though we may regret its consequent influence on the many, who wish to fignalize themselves, under its delusive banner. This observation naturally obtruded on our imagination, upon the perusal of the last Number of the Bot. Mag. where the Kidney-leaved Crane's-bill is mentioned as " one of the rarest of the Geranium tribe;" are we to understand Geranium in this place as a new title for a natural order of plants; or, as folely confined to one Genus? Poor Geranium! although thou hast been so long excluded from thy station, in scientific English, yet shalt thou not lose thy due weight, against all thy opponents, in pure descriptive English prose; and perhaps some day may be deemed, by the learned, worthy a place amongst English Genera. With Mr. Donn, we humbly conceive the old title Crane's-bill, as ill adapted to the three Genera of M. L'Heritier; and that, if new Latin names are to be foifted on us, for plants already well known, and settled, by that great master of the science, Linnæus; to whose opinion ours shall ever bow, English ones consonant, should be likewise adopted; and that Heron's-bill for Erodium, Stork'sbill for Pelargonium, and Crane's-bill for Geranium, will prove no greater puzzle to the English Botanist. Unfortunately we are, and have been, so attached to old fashions, that we still mean to continue the title Geranium, as it is apparently best understood; whether, in English or Latin, descriptive, or scientific; as long as the public shall continue so honourably to patronize the Botanist's Repository.



Granium tomentosum

PLATE CXVI. GAULTHERIA PROCUMBENS.

Trailing Gaultheria.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

CALYX.. Perianthium duplex, approximatum, perfistens.

P. exterius diphyllum, brevius; foliolis semi-

ovatis, concavis, obtufis.

P. interius monophyllum, quinquefidum

campanulatum; fegmentis femiovatis.

Corolla monopetala, ovata, femiquinquefida; limbo parvo, revoluto.

Nectarium corpufculis decem, fubulatis, erectis, breviffimis, cingentibus germen intra ftamina.

STAMINA. Filamenta decem, fubulata, incurva, corolla breviora; receptaculo inferta. Antheræ bicornes; corniculis bifidis.

PISTILLUM. Germen subrotundum, depressum.
Stylus cylindricus, longitudine corollæ.
Stigma obtusum.

Pericarpium. Capfula subrotunda, obtusa, pentagona, depressa, quinque locularis, quinque valvis, undique tecta perianthio interiore transformato et enato in baccam subrotundam, coloratam, apice perviam.

SEMINA plurima, subovata, angulata, ossea.

EMPALEMENT. Cup double, close together, remaining.

Outer Cup two leaved, shorter; leastlets half egg-shaped, concave, and blunt.

Inner Cup one leaf, five-cleft, bell-shaped;

fegments half egg-shaped.

Blossom one leaf, egg-shaped, slightly five-cleft; border small, rolled back.

Honey-cup ten small substances, awl-shaped, upright, very short, surrounding the seed-bud within the chives.

CHIVES. Ten threads, awl-shaped, turned inwards, shorter than the blossom; fixed into the receptacle. Tips two-horned; horns two cleft.

Pointal. Seed-bud roundish and flattened; Shaft cylindrical, the length of the blossom. Summit obtuse.

SEED-VESSEL. Capfule roundish obtusely fivefided, flattened, five cells, five valves; covered on all fides by the inner cup, transformed and swelled to a roundish berry, coloured, open at top.

SEEDs many, nearly egg shaped, angular and

SPECIFIC CHARACTER.

Gaultheria foliis ovatis, obtuse-dentatis, apice confertis; caulis flexuosus, filiformis.

Gaultheria with egg-shaped leaves, bluntly toothed, and crowded together at the top; stem grows zigzag and thread-shaped.

REFERENCE TO THE PLATE.

- 1. A Bloffom complete.
- 2. The Empalement, natural fize.
- 3. The Empalement, magnified.
- 4. The Chives as they ftand on the receptacle, magnified.
- 5. The Pointal and feed-bud, with the furrounding honey-cup, magnified.
- 6. The inner Cup of the Empalement, when the fruit is ripe, natural fize.
- 7. A feed vessel of the natural fize when ripe, detached from its cup. 8. A ripe capsule, cut open transversely.

FROM the eighth Ed. of Miller's Dictionary, we learn that, this plant was cultivated at the Physic Gardens, Chelsea, in the year 1765. That so ornamental, and so easily propagated a plant as the Gaultheria, should have been so little noticed, or cultivated in our gardens, is rather singular; as, it is perfectly hardy in every exposure, an evergreen, and from the beautiful appearance of the fruit and flowers, which come in succession nearly through the whole year; must be considered, as one of our prettiest creeping or dwarf shrubs, for the front of the shrubbery borders, &c. as it never rises higher than six, or eight inches; forming a compact matted clump, which may be made to spread to a considerable extent, if planted in light sandy peat earth. The very curious conformation of the fruit, which is eatable, differing from every known Genus of plants; as well as, the peculiar property of the leaves; point out the Gaultheria, as a particular object for observation, and comment, to the experimental Botanist. In Canada, North America, where it is native, an infusion of the leaves is used as a substitute for tea; or a few of them, either dried, or plucked fresh from the plant, when mixt with the commonest bohea, communicate to it a flavour, equal to fine Hyson.



PLATE CXVII.

GENTIANA PURPUREA.

Purple flowered Gentian.

CLASS V. ORDER II.

PENTANDRIA DIGYNIA. Five Chives. Two Pointals.

GENERIC CHARACTER.

CALTE. Perianthium quinquepartitum, acutum, perfiftens; laciniis oblongis.

COROLLA. Petalum unicum, inferne tubulatum, imperforatum, fuperne quinquefidum, planum, marcescens; figura varia.

STAMINA. Filamenta quinque, fubulata, corolla breviora. Antheræ fimplices.

PISTILLA. Germen oblongum, cylindraceum, longitudine staminum. Styli nulli. Stigmata duo, ovata.

Pericarpium. Capíula oblonga, teres acuminata, apice leviter bifida, unilocularis, bivalvis.

Semina numerofa, parva. Receptacula duo, fingula valvulæ longitudinaliter adnatæ.

EMPALEMENT. Cup five divisions, sharp and permanent; segments oblong.

BLOSSOM. Petal only one, lower part tubular, and close; upper part five-cleft, flat, withering, and variously shaped.

CHIVES. Five threads, awl-shaped, shorter than the blossom. Tips simple.

Pointals. Seed bud oblong, cylindrical, as long as the chives. Shafts none. Summits two, egg-shaped.

SEED-VESSEL. Capfule oblong, cylindrical, tapering, flightly cleft at the end, one-celled, and two valves.

SEEDS numerous and fmall. Receptacles two, joined to each valve longitudinally.

SPECIFIC CHARACTER.

Gentiana corollis campanulatis, 6-7 fidis, atropurpureis, punctatis, verticillatis; calycibus membranaceis, fub-spathaceis, truncatis. Gentian with bell-shaped blossoms, 6-7 cleft, deep purple, dotted and whorled; empalement skinny, almost sheathed, and appearing cut off at the ends.

REFERENCE TO THE PLATE.

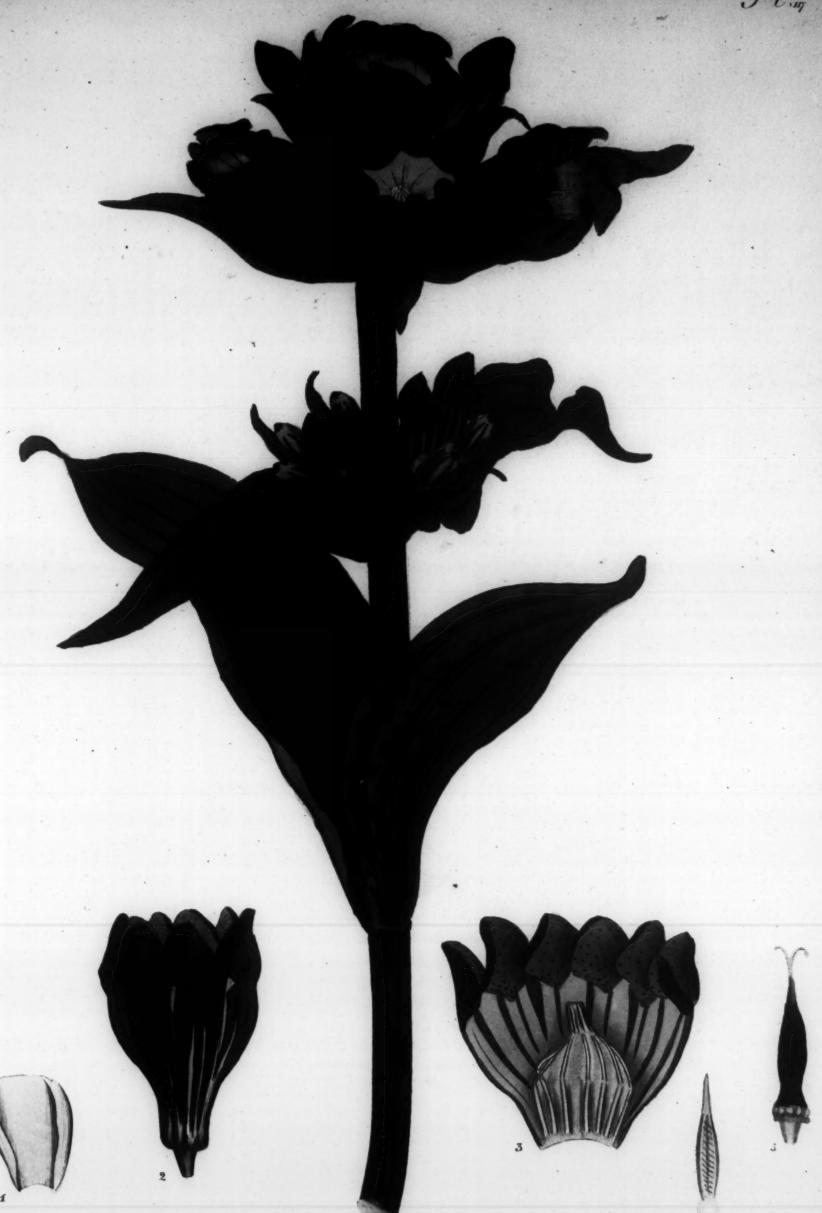
- 1. The Empalement.
- 2. A Bloffom, complete.
- 3. The same cut open, to shew the situation of the Chives.
- 4. Half the Seed-bud split longitudinally, to shew its interior structure.
- 5. A Seed-veffel, nearly ripe.

As a native of the Helvetian Alps, the Purple flowered Gentian is consequently, a hardy plant with us, requiring only to be planted in a light soil; may be increased from the seeds, which are produced in abundance, or by parting the root in autumn. The seeds are perfected, within a fortnight after the flower is decayed; and should be sown on light sandy peat, covering them very slightly, as soon as possible after they have been dried.

There appears a strange variety of opinions amongst Botanists concerning this, and two other species of Gentian, the Punctata and the Pannonica; which, as many have observed, although denied by others, are only varieties of each other; surely, a slight variation in height, the shape of the divisions of the border, or what is of less consequence, (as they vary, in that regard so much, on the same plant) their number; are not of sufficient weight to form a specific distinction.

This plant is faid, in the Hort. Kew. to have been introduced in the year 1768 by Professor de Saussure: from what cause, we cannot judge, if it is so old an inhabitant, why it should not be more plentiful with us; as at present sew collections possess it, and it is sold at a very high price. Our drawing was made at the Nursery, Hammersmith.

Film



Gentiana purpurea

PLATE CXVIII.

GLADIOLUS GRANDIFLORUS.

Large flowered Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fexpartita, ringens. STAMINA adfcendentia. BLOSSOM, fix divisions, gaping.
CHIVES ascending.
See GLADIOLUS ROSEUS, Pl. XI. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis enfiformibus nervofis; fcapo fubtrifloro, longitudine foliorum; floribus erectis, maximis; laciniis corollæ emarginatis, undulatis, striatis, sub-æqualibus. Gladiolus with sword-shape leaves, nerved; flower-stem having mostly three flowers, and of the length of the leaves; flowers grow upright, and very large; the segments of blossom are notched at the ends, waved, striped, and nearly of an equal length.

REFERENCE TO THE PLATE.

- 1. The two fheaths of the Empalement.
- 2. The Blossom cut open, with the Chives attached.
- 3. The Pointal, and Seed-bud.

FROM the figures in the Collect. and Ic. rar. of Jacquin, we were led to think, this must be the same, or a strong variety of his G. slorabundus; but, as his trivial name and specific character so ill accord with our plant, we have continued it under that, by which it was fent to England in 1788. It is a very free blowing bulb, and will live through the winter, with very little protection; slowering about June or July, and does not require to be removed from the pot, to prevent its rotting. Our drawing was taken in June this year, at the Hammersmith Nursery.

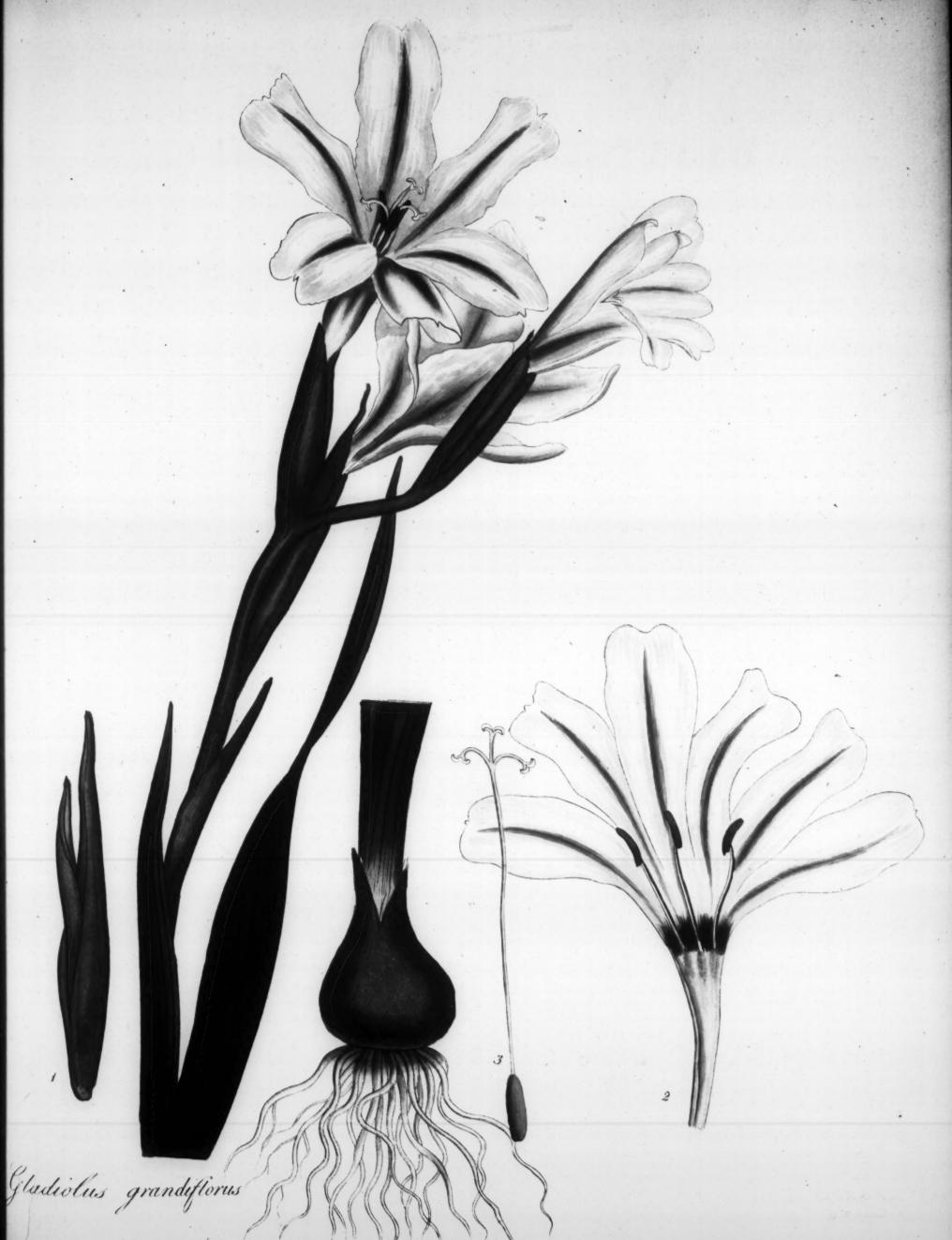


PLATE CXIX.

STRUTHIOLA OVATA.

Oval-leaved Struthiola.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

See Struthiola imbricata, Pl. CXIII. Vol. II.

ESSENTIAL GENERIC CHARACTER.

Perianthium diphyllum. Corolla tubulosa 4-fida; nectarium, glandulæ octo fauci circumpositæ. Sem. 1. subbaccatum. Cup two-leaved. Blossom tubular, 4-cleft; honey-cup, 8 glands placed round the mouth of the blossom. One seed like a berry.

SPECIFIC CHARACTER.

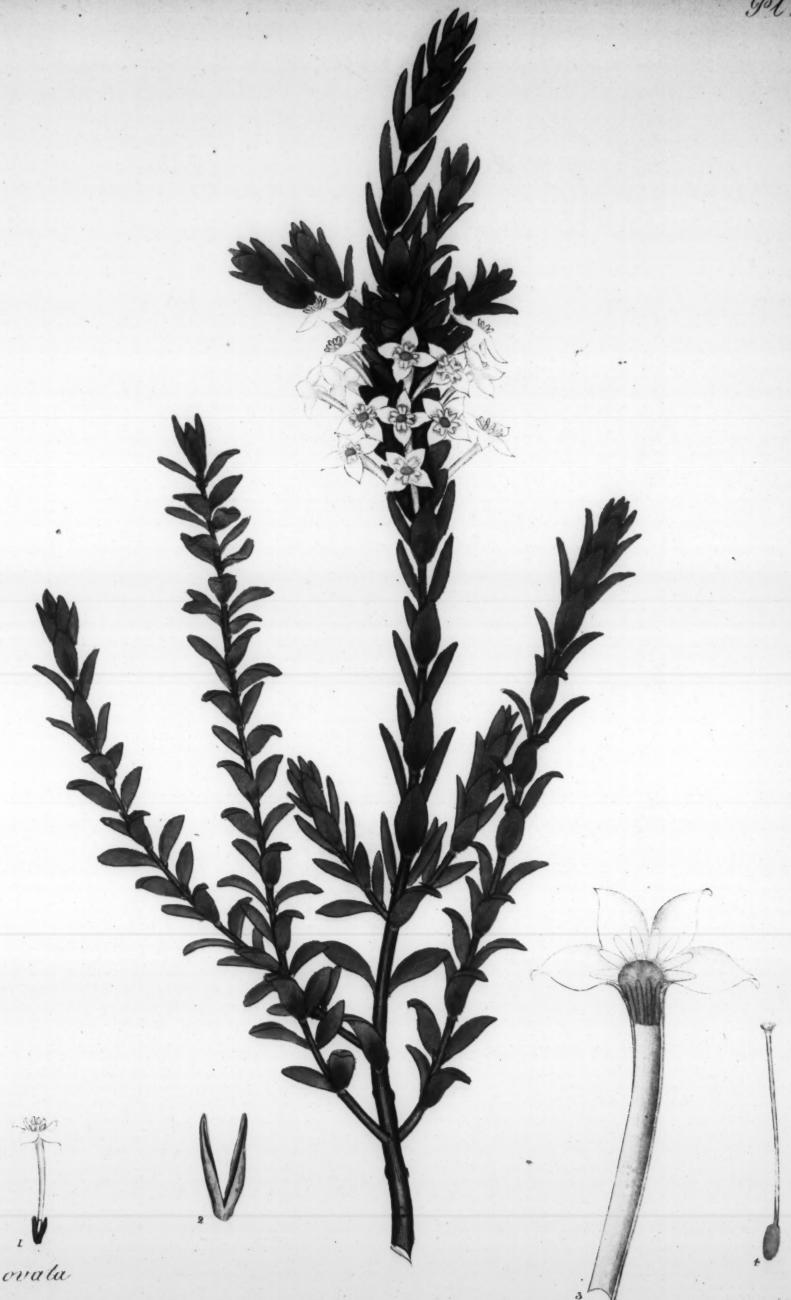
Struthiola foliis ovatis, glabris; ramis glabris, rugofis.

Struthiola with egg-shaped, smooth leaves; branches smooth and wrinkled.

REFERENCE TO THE PLATE.

- 1. A Bloffom, complete.
- 2. The Empalement, magnified.
- 3. The Blossom cut open, with the Chives attached, magnified.
- 4. The Pointal and feed-bud, magnified.

This species of Struthiola is described by Thunberg, in his Prodromus, under the specific title it here bears, and was first introduced to us in the year 1794, in seeds received from the Cape of Good Hope, by Messrs. Lee and Kennedy, Hammersmith. It is a very tender greenhouse plant, and very subject to be destroyed by damps, or too much moisture, even in summer; the flowers, (as are most of this natural order,) are extremely fragrant and continue in full persection from March till June. The mode of propagation is by cuttings, made in May, which should be placed under a hand-glass in a pot of light loam, and shaded from the mid-day sun. It thrives best in a mixture of half peat and half loam. The drawing was made in the spring of 1798, from a plant in the Hibbertian Collection, Clapham; then in flower, for the first time in England.



Struthiola ovala

FUCHSIA LYCIOIDES.

Box Thorn-like Fuchfia.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum. Infundibuliforme, coloratum, fuperum marcefcens; limbus quadripartitus.

COROLLA. Petala quatuor, fessilia, ore calycis inferta.

STAMINA. Filamenta octo, inæqualia, filiformia, erecta, tubo calycis inferta. Antheræ ovatæ.

PISTILLUM. Germen inferum, ovatum. Stylus filiformis, erectus, longitudine staminum. Stigma tuberculatum.

Pericarpium. Bacca carnofa, ovata, quadrilocularis.

Semina plura, parva, receptaculo columnari affixa.

-EMPALEMENT. Cup one leaf, funnel-shaped, coloured, above and withering; border four divisions

BLOSSOM. Four petals, fitting close on the mouth of the cup, into which they are inferted.

CHIVES. Eight threads, unequal, thread-shaped, upright, fixed into the tube of the cup. Tips egg-shaped.

POINTAL. Seed-bud beneath, egg-fhaped.

Shaft thread-fhaped, upright, the length of
the chives. Summit composed of small
knobs.

SEED-VESSEL. A fleshy berry, egg-shaped, and four valves.

Seeds many, fmall, affixed to a pillar-shaped receptacle.

SPECIFIC CHARACTER.

Fuchfia foliis ovatis undulatis, fubternis; pedunculis unifloris, axillaribus; laciniis calycis reflexis. Fuchfia with egg-shaped leaves, waved, and growing mostly by threes; foot-stalks with one flower growing from the insertion of the leaf, the segments of the cup reflexed.

REFERENCE TO THE PLATE.

- 1. A Flower cut open, to expose the insertion of petals and chives into the cup.
- 2. The Pointal, complete.
- 3. A ripe berry, natural fize.

No plant perhaps ever excited such universal admiration, as the Scarlet Fuchsia; wherefore, the addition of a second species to our collections, of so fine a Genus, must be considered as a very agreeable acquisition. The Box Thorn-like Fuchsia, is a native of the North-west coast of America; and was first brought to England, in the year 1796: it is certainly, much more tender than the Scarlet Fuchsia, as the plant constantly perishes, as low as to the earth, if not preserved in the hothouse; but whether it is herbaceous the root surviving, we have not sufficient experience to determine. The increase is certain and easy, if cuttings are made, from the young shoots, early in March, and plunged in a hotbed, or in the bark of the hothouse, six or eight in a pot; from which they may be removed, about June, into large pots for flowering, which will be from August till November. Loam, with a small portion of rotten dung, is the soil it most approves.

The specific title we have adopted, is from the very great resemblance the plant bears to Lycium asrum, or the Box-Thorn; although we have some doubts, whether this species may not be the F. triphylla of Father Plumier. But as the F. coccinea, as well as this plant, has frequently the leaves growing by threes; we thought that, as it as yet had no specific title with us, the character of the plant would be best distinguished, by the name we have chosen.



Fuchsia Cycioides

PLATE CXXI.

GERANIUM CORTUSÆFOLIUM.

Cortufa-leaved Geranium.

CLASS XVI. ORDER IV. of Suppl. System. Veg.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. Fructus roftratus, penta-coccus. One POINTAL. Five fummits. Fruit furnished with long awns, five dry berries.

See GERANIUM GRANDIFLORUM, Pl. XII. Vol. I.

SPECIFIC CHARACTER.

Geranium foliis cordatis, fublobatis, ferratis, tomentofo-fericeis; petiolis longissimis, erectis; floribus umbellatis, odoratissimis, stipulis subulatis; caule robusto, subcarnoso. Geranium with heart-shaped leaves, slightly lobed, sawed, and covered with a downy pile; footstalks very long and upright; flowers grow in umbels, and are very sweet scented; leaf-props awl shaped; stem stout, and rather sleshy.

REFERENCE TO THE PLATE.

- 1. The Empalement cut open.
- 2. The Chives and Pointal, natural fize.
- 3. The same, magnified.
- 4. The Chives cut open, magnified.
- 5. The Seed-bud, and Pointal, magnified.

THE Cortusa-leaved Geranium is a tender plant, seldom growing to more than a foot in height; producing its bloffoms, which are extremely fragrant, in erect bunches, from the fummit of the branches, and must be protected, through the depth of winter, in the nothouse. The propagation is both slow and difficult, as it rarely perfects any feeds, and forms but few branches. The cuttings when taken off, which ought to be done about the end of May, should be exposed to the sun, till the part where cut has formed a tough coat over the wound, which will take place in two or three days; when they will not be so subject to rot from the moisture of the earth, as if planted when just taken from the plant. These instructions are necessary to be observed, in the propagation of all the thick-stemmed Geraniums, by cuttings. A mixture of fandy peat, with a small quantity of old rotten dung, will prove the best compost for preserving this plant. Our drawing was taken this year, in July, at the Hammersmith nursery. A mistake has arisen with regard to the name of this species of Geranium; which was evidently not known to any botanist, antecedent to its being brought to England in 1786 by Mr. A. Hove, a native of Poland, from the fouth west coast of Africa, and found by him in about the 23d degree of fouth latitude. Profesfor Martyn, in his new edition of Miller's Dictionary, article Pelargonium 43, has taken for granted that this is the plant defigned by Profesfor Jacquin, where he treats of G. cortusæfolium; giving the G. tabulare of Burman, Linnæus, &c. as synonymous to it; but undoubtedly, no fuch intention could be in the Professor, as the uniting these two plants, which are so entirely dissimilar; but only an unfortunate inclination to alter an old established name, for one, which he conceived more appropriate to a well known, common species; whence the confusion; the constant consequence of such useless alterations, whether generic or specific.



Geranium cortusæfolium

Date to by M. Lawrence & Pingale boundary

PLATE CXXII. GLADIOLUS GALEATUS.

Helmet-flowered Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fexpartita, ringens. STAMINA adfcendentia. BLOSSOM fix divisions, gaping.
CHIVES ascending.
See GLADIOLUS ALATUS, Vol. I. Pl.VIII.

SPECIFIC CHARACTER.

Gladiolus foliis fub-ovatis, costatis, mucronatis; spathis carianatis, tubo longioribus; lacinia summa concava, sub-erecta.

Gladiolus with leaves nearly egg-shaped, ribbed, and pointed at the ends; sheaths keeled, and longer than the tube of the blossom; the upper segment concave, and almost upright.

REFERENCE TO THE PLATE.

- 1. The two sheaths of the Empalement.
- 2. The Chives, with part of the tube of the Blossom, to which they are attached.
- 3. The Pointal and feed-bud.

We are certainly led to think with Thunberg, that this plant is not a species, but a very singular and beautiful variety, of G. alatus, of which we have seen above six or seven. Nevertheless, upon the authority of Pros. Jacquin, who in his Icones 2. tab. 258, has sigured it under this name specifically; and as it has been continued as such, by the accurately discriminating and indefatigable Willdenow; (to whose labours, all lovers of the science are so much indebted, for his invaluable, and copious new Edition of the Species plantarum,) we have thought it but right to acquiesce, without alteration in the name adopted by them. For the management of this plant we must refer our readers to the G. alatus, Pl. VIII. Vol. I. of this work.

The Helmet-flowered Gladiolus was not seen in England, till the spring of the year 1800; when the roots were received at Clapham, from the Cape of Good Hope, sent by the Collector there, for the Hibbertian collection, amongst an infinite number of others; many having flowered this year, of which we have drawings, by permission of the proprietor, and are destined to enrich the Bot. Rep. being perfectly new to this country. The figure of this plant was taken in August, but the regular season of its flowering, must be much earlier (if planted with the other Cape bulbs in October,) that is to say, about the month of May or June.



PLATE CXXIII. THUNBERGIA FRAGRANS.

Twining Thunbergia.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

CALYX. Perianthium duplex; exterius, diphyllum, foliolis ovatis, concavis, longitudine fere tubi; interius, monophyllum, multipartitum, laciniis circiter duodecim, fubulatis, perianthio exteriori triplo brevioribus.

COROLLA monopetala; tubus fensim ampliatus; limbus quinquesidus; laciniis æqualibus, ovatis, obtusissimis, tubo triplo breviori-

STAMINA. Filamenta quatuor, tubo fupra bafin inferta, inæqualia; duobus inferioribus brevioribus; duobus fuperioribus tubo breviora. Antheræ oyatæ, adnatæ.

PISTILLUM. Germen fuperum. Stylus filiformis, tubo paullo brevior, erectus. Stigma bilobum.

Pericarpium. Capfula globofa, roftrata, glabra, bilocularis, longitudinaliter dehiscens; roftrum compressum, fulcatum, lineare, obtusum; dissepimentum obovatum, emarginatum, sub apice foramine perforatum, lateribus membranaceum, persistens.

Semina in fingulo loculamento bina, reniformia, rugofa, hinc convexa, inde concava fulco longitudinali.

EMPALEMENT. Cup double; the outer one twoleaved; leaflets egg-shaped and concave, nearly the length of the tube; the inner one-leaved, many divisions, the segments about twelve, awl-shaped, thrice as short as the outer cup.

BLOSSOM, one petal; tube widening gradually; border five-cleft; fegments equal, eggfhaped, very blunt, three times as fhort as

the tube.

CHIVES. Four threads, fixed into the lower part of the tube, unequal; the two lower-most the shortest; the two uppermost shorter than the tube. Tips egg-shape, pressed to the threads.

POINTAL. Seed-bud above. Shaft thread shape, a little shorter than the tube, and upright.

Summit two lobed.

SEED-VESSEL globular, beaked, fmooth, two celled, and splits longitudinally; beak flattened, awl-shaped, linear, and blunt; partition inversely egg-shaped, not hed at the end, pierced with a hole at the top, skinny at the edges, and remaining.

fkinny at the edges, and remaining.

SEEDS two in each cell, kidney-shaped, rough, convex on one fide, and concave on the

other by a longitudinal furrow.

SPECIFIC CHARACTER.

Thunbergia foliis ovato-acuminatis, fub-dentatis; corolla alba, hypocrateriformis, tubo compresso; caule volubili. Thunbergia with egg-shaped, tapering leaves, a little toothed; blossom white, salver-shaped, the tube flattened; stem twining.

REFERENCE TO THE PLATE.

1. The outer cup of the Empalement.

The inner cup of the fame, magnified.
 A Bloffom cut open, to flew the fituation of the Chives.

4. The Shaft and Summit, natural fize.

5. The Seed-bud, magnified.

6. A ripe Capfule.

7. A ripe Seed.

The Thunbergia, here figured, is a native of the East Indies, from the Coromandel coast; was introduced to Britain in the year 1796, at the same time with the Ixora pavetta, by the Hon. Lady Dowager De Clifford. It is easily propagated, by cuttings, or from the seeds, which ripen with us: it should be kept in light, rich earth in the hothouse; where it will flower from May, till September; in which month this year our drawing was taken at Kensington Gore from a plant in the collection of James Vere, Esq. But although Dr. Roxburgh's reason for adopting the specific character he has given it, that the place where it grows is sweet scented, though the plant is not, seems rather a little strained, we have not thought it right to alter it; as unquestionably, any name would have been equally appropriate, since neither the flowers, or any part of the plant, root or branch, has the least scent.

The plant from which this genus was originally formed by the younger Linnæus in his Sup. Plant. P. 46, is a native of the Cape of Good Hope; and we have our doubts, whether this plant ought to be placed with it; for although it accords in the effential character, of a double cup, the only one thought necessary, by Linnæus, to divide it from Barleria; yet, from the number of parts in which it differs from his generic character, such as the shape of the blossom, the-length of the pointal, the situation and shape of the chives, the very different shape of the seeds, &c. we are led to think, it ought to be considered as a distinct Genus. But in following such good authority as the able and learned Dr. Roxburg, it is to be hoped, we shall stand excused in continuing the same name he has assigned it, without alteration at least, if not without comment.



by & Ridown & Hughelinga

PLATE CXXIV. HELICONIA PSITTACORUM.

Parrot-billed Heliconia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ communes partialesque alternæ, distinctæ, persistentes.

Perianthium nullum.

COROLLA. Petala tria, oblonga, canaliculata, erecta, acuta, æqualia.

Nectarium diphyllum; foliolo altero petalis fubæquali; altero brevissimo, canaliculato, uncinato, opposito.

STAMINA. Filamenta quinque, linearia. Antheræ erectæ, longæ.

PISTILLUM. Germen inferum, triquetrum. Stylus ftaminibus fere brevior. Stigma longum, gracile, curvatum, capitulo terminali.

Pericarpium. Capíula oblonga, truncata, triquetra, trilocularis, trivalvis.

SEMINA folitaria, oblonga.

CALYX. Sheaths common and partial alternate, diffinct, remaining.

Cup none.

BLOSSOM. Petals three, oblong, channelled, upright, pointed, equal.

Honeycup two leaved; one leaflet nearly the length of the petals; the other very short, channelled, hooked and opposite to the larger.

CHIVES. Five threads, linear. Tips upright and long.

POINTAL. Seed-bud beneath, three-fided. Shaft fcarcely shorter than the chives. Summit long, slender, curved, and terminating in a small head.

SEED-VESSEL. Capfule oblong, appearing cut off at the end, three-fided, three cells, three valves.

SEEDS folitary, oblong.

SPECIFIC CHARACTER.

Heliconia. Foliis glaberrimis, lanceolatis; inflorescentia glaberrima; spadice terminali flexuoso; spathis multifloris, marginibus revolutis; nectario lanceolato, concavo, integro.

Heliconia with very smooth, lance-shaped leaves; the inflorescence quite smooth; stem terminating in a zig-zag form; sheaths containing many flowers and rolled back; honeycup lance-shaped, concave, and entire.

REFERENCE TO THE PLATE.

- The Bloffom, with the three petals detached from the upper part of the Honey-cup, which is fhewn in front with the smaller leaf inclosed within the larger.
- 2. The Chives, with the lower part of the Honey-cup, to shew their insertion at its base, and the smaller leaf of the Honey-cup in its place.
- 3. The smaller leaf of the Honey-cup, magnified.
- 4. The Shaft and Summit, the Summit detached magnified.
- 5. The Seed-bud, natural fize.
- 6. The Seed-bud cut transversely, magnified.

The Parrot-billed Heliconia, a native of the continent of South America, as well as most of the West India Islands, was first received, in plants, from the island of St. Vincents, in the year 1797, by Thomas Evans, Esq. of Stepney; in whose collection it first flowered, in September 1798, when our drawing was taken. This plant requires a considerable degree of moisture and heat, as well as much root room and rich earth, to make it flower in perfection; as it seldom opens its blossoms freely without such treatment, and even with such assistance, they are to be seen but for a few hours in that state. It propagates from the roots, throwing up a number of suckers from the joints, which are formed at a considerable distance from the plant. The younger Linnæus in his Sup. Plant. of 1781, p. 158, has described this plant under our specific title, but different in some few points; which appear to arise more from his ideas of the various parts, than from any real difference in the plant itself. Swartz in his Obs. 98, gives sheaths to his plant, which Linnæus, we presume, denominates flower stem leaves, &c. yet we have no doubt, but they have both described the same plant; and perfectly agree with Willdenow and Martyn, that the H. psittacorum of both authors is the same, and have as little of this being the plant.



Heliconia psittacorum

But a the tel Greats ...

PLATE CXXV.

VACCINIUM PARVIFLORUM.

Small flowered Whortle-berry.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX fuperus. Corolla monopetala.

FILAMENTA receptacula inserta. Bacca quadrilocularis, polysperma.

Cup superior. Blossom one petal
THREADS fixed to the receptacle. A berry with
four cells, and many seeds.
See Vaccinium arctostaphyllos, Pl. XXX. Vol. I.

SPECIFIC CHARACTER.

Vaccinium foliis lanceolatis, undulatis, venofis; floribus racemofis; pedunculis longissimis, bracteatis; corolla conica, striata. Stamina decem.

Whortle-berry, with lance-shaped, waved, and veined leaves; flowers grow in long bunches; foot stalks of the flowers very long, having floral leaves; blossom cone - shaped, and streaked. Ten Chives.

REFERENCE TO THE PLATE.

- 1. A Bloffom.
- 2. The Chives magnified.
- 3. The Seed-bud, Cup, and Pointal, the Summit detached, magnified.

This species of Whortle-berry was first brought, from North America, in the year 1784. It is one of those with ten chives, &c. and of the same nature with those we have already figured; for its treatment, and increase, we must therefore refer our readers to V. formosum, Pl. XCVII. Vol. II. The drawing was taken in May 1799, at the Hammersmith nursery.



Vaccinium parviforum

Hat we the Sol Down Das" !

PLATE CXXVI.

HIBBERTIA VOLUBILIS.

Twining Hibbertia.

CLASS XIII. ORDER V.

POLYANDRIA PENTAGYNIA. Many Chives. Five Pointals.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum; foliolis coriaceis, sub-ovatis, concavis, acutis, per-fistentibus.

COROLLA. Petala quinque, obcordata, calyce longiora.

STAMINA. Filamenta numerofa, filiformia, receptaculo fructificationis inferta. Antheræ lineares, erectæ, emarginatæ.

PISTILLA. Germina quinque, ovato-oblonga, definentia in flylos flexuosos, longitudine fere flaminum. Stigmata fimplicia, apice concava. Corpusculum subulatum, membranaceum in medio germinum, eorumque longitudine.

Pericarpium. Capfulæ quinque ovatæ, trigonæ, uniloculares, diftinctæ.

SEMINA plurima, fubrotunda.

EMPALEMENT. Cup five leaves; leaflets tough, nearly egg-shaped, concave, sharp, and remaining.

BLOSSOM. Five petals, inverfely heart-shaped, longer than the cup.

CHIVES. Threads numerous, thread-shaped, fixed into the receptacle of the fructification. Tips linear, upright, notched at the ends.

Pointals. Five feed-buds, between oblong and egg-shaped, terminating in zig-zagged shafts, nearly the length of the chives. Summits, simple, and hollowed at the top. A small awl-shaped, skinny substance in the middle of the seed-buds, and of their length.

SEED-VESSEL. Five capfules, egg shaped, three-fided, one celled, and distinct.

Seeps many, roundish.

SPECIFIC CHARACTER.

Hibbertia foliis obtufe-ferratis, obovato-lanceolatis, floribus folitariis, fessilibus, fœtidistimis.

Hibbertia with obtusely sawed leaves, between lance and inverfely egg-shaped; flowers grow solitary, fitting close on the stem; very setid.

REFERENCE TO THE PLATE.

1. The Empalement.

- 2. A leaf of the bloffom.
- The Chives and Pointals.
 One Chive, magnified.

5. Pointals apart, as they stand in the center of Chives.

6. The Pointals spread open, with the skinny substance which stands in their center.

7. One of the Pointals, magnified.8. A Seed-bud, cut transversely.

9. A half ripe feed, magnified.

The Hibbertia volubilis, (as are the three species of which we have seen specimens,) is from New Holland, near Port Jackson; was raised from seeds in many different collections near London in the year 1792. It is a hardy green house plant, and makes a very handsome climber, for trellis, or pillars in a conservatory. Its growth is very rapid, and its flowers which are very brilliant and specious, continue in succession from May till September. The increase is certain and easy from cuttings, made in the month of May, and placed on a gentle hotbed, or plunged in the bark-bed of the hothouse. It delights in a light sandy peat soil. Our drawing was made from a plant, in the collection of the Hon. Lady Dowager De Clifford, Paddington.

As hitherto this tribe of Plants has not been given to the public by any truly established name; (the different species having been erroneously titled Dillenias, which have many pointals,) and as we find it to differ, from any yet described Genus, we have named it after G. Hibbert, Esq. of Clapham Common, Surry; whose knowledge and fervor in botanical pursuits, as well as liberality in his endeavours to enrich our collections, from every quarter of the globe, but especially from the Cape of Good Hope, has not been exceeded by any; and we are well assured, no name deserves a place, on

botanical record, more than that of HIBBERT.



Pull, as the Act Directs Don't be by Ho Indian & Hought bridge

PLATE CXXVII.

JASMINUM GRACILE.

Slender-stemed Jasmine.

CLASS II. ORDER I.

DIANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, tubulatum, oblongum; ore quinquedentato, erecto; perfiftens.

COROLLA monopetala, hypocrateriformis; tubus cylindraceus, longus; limbus quinquepartitus, planus.

STAMINA. Filamenta duo, brevia. Antheræ parvæ, intra tubum corollæ.

PISTILLUM. Germen fubrotundum. Stylus filiformis, longitudine staminum. Stigma bisidum.

Pericarpium. Bacca ovalis, glabra, bilocularis feu bicapfularis.

Semina duo, magna, ovato-oblonga, arillata, hinc convexa, inde plana.

Obs. Figura floris acuminata et obtusa variat. Bacca in aliis simplex, in aliis dicocca.

EMPALEMENT. Cup one-leaved, tubular, oblong; five-toothed at the mouth, and upright; remaining.

Blossom, one petal, falver-shaped; tube cylindrical, long; border five divisions, flat.

CHIVES. Threads two, short. Tips small, within the tube of the blossom.

POINTAL. Seed-bud roundish. Shaft threadshaped, the length of the chives. Summit two-cleft.

SEED-VESSEL. Berry oval, fmooth, two-celled or two-capfuled.

SEEDS two, large, oblong egg-shaped, each in its proper seed-coat, convex on one side, and flat on the other.

Obs. The flower varies in its character of tapering to a point, or in being blunt-ended. In fome the berry is fimple, in others double-feeded.

SPECIFIC CHARACTER.

Jasminum petiolis foliorum geniculatis; foliis ovatis, oppositis, nitidis, simplicibus; floribus umbellatis; laciniis corollæ obtusis, undulatis.

Jasmine with the foot-stalks of the leaves jointed; egg-shaped leaves, growing opposite, shining and simple; slowers grow in umbels; the segments of the blossom are blunt and waved.

REFERENCE TO THE PLATE.

1. The Cup.

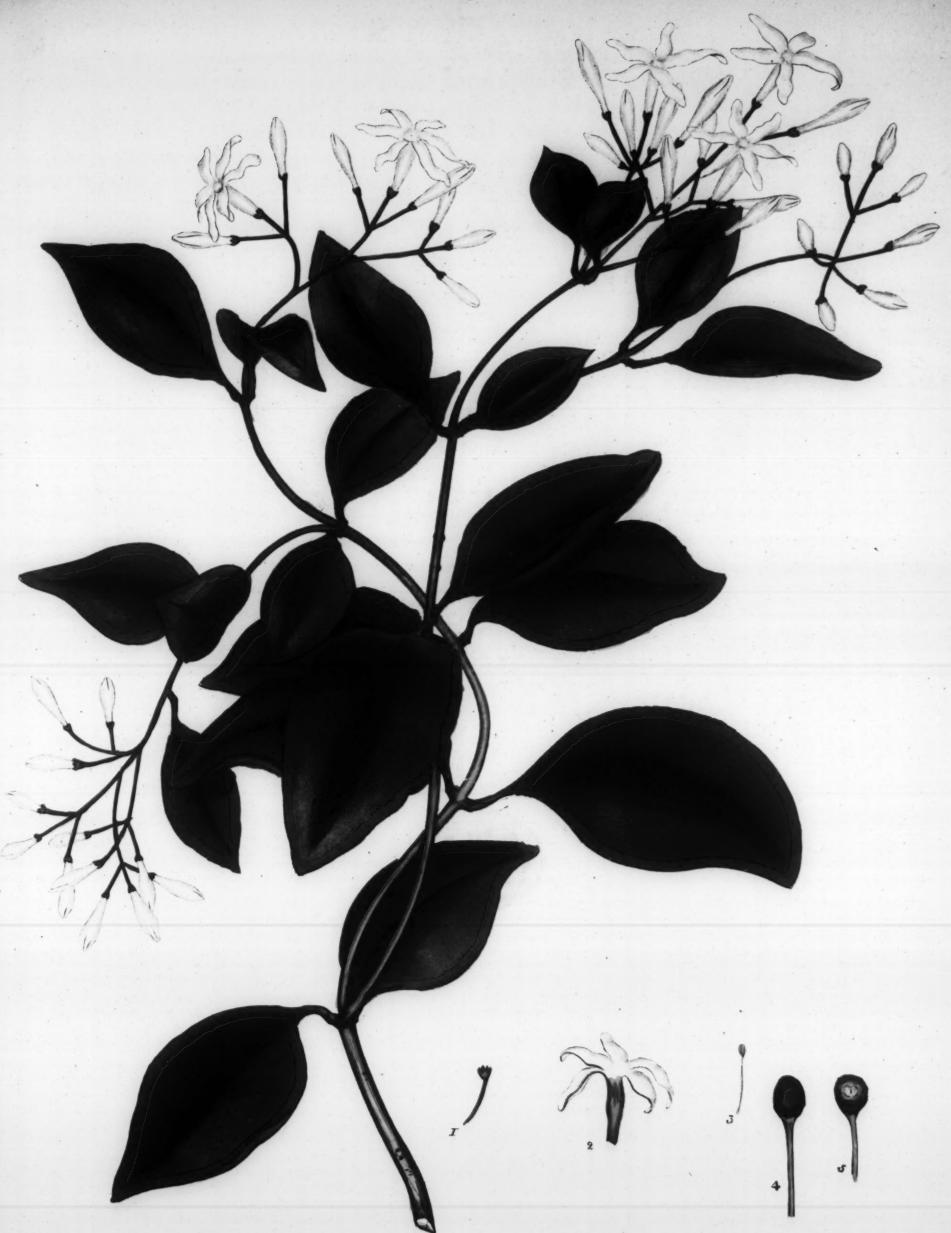
2. A Bloffom spread open, to expose the fituation of the Chives.

3. The Shaft and Summit.

4. A ripe Berry.

5. The same cut transversely, to shew the cells and seeds.

The plant here figured, we confider as a diftinct species from the J. simplicifolium of Forster, which he describes as a native of the Friendly Isles, in the South Seas; and likewise from the J. oblongum of Burman, which is given (but with a query) as a synonim to the J. simplicifolium of the former Author by Willdenow, in his Sp. Plant. p. 38, Part I. In the year 1792, the seeds of this plant were received by Messrs. Lee and Kennedy, Hammersmith, with the Bignonia pandorana, and many others, communicated by Colonel Paterson, then commanding a detachment stationed for a time on Norfolk Island, where it is native. To the green-house it is a considerable acquisition, either for a climber, or otherwise, as it is rarely without blossoms from July, till the end of November; being rather more tender than many of its congeners, which are in general destined to that station; it should be placed as night the flue, in as dry and airy a part of it as possible. A light, sandy peat soil, without mixture, is the most congenial to its growth; and it is increased by cuttings, made in the month of March, put, from 12 to 20, according to the size of the pot, under a small bell-glass, in the before-named earth, and plunged either in the bark-bed of the hot-house, or in the heat of a common hot-bed.



Jasminum gracile

Ash some at Beach Dry 1 10

PLATE CXXVIII.

IXIA POLYSTACHIA. Var. incarnata.

Many-spiked Ixia. Var. flesh-colour.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis. STAMINA tria, erectiusculo-patula.

BLOSSOM 6-petals, spreading, equal.

SUMMITS three, nearly upright and spreading.

See IXIA REFLEXA, Pl. XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia foliis linearibus; fcapo fpicis pluribus; corollæ laciniis fubreflexis, incarnatis.

Ixia with linear leaves; flower-stem with many spikes of flowers; segments of the blossom a little bent backwards, and slesh-coloured.

REFERENCE TO THE PLATE.

- 1. The two Sheaths of the Empalement.
- 2. A Bloffom spread open.
- 3. The Pointal natural fize, with one of the Summits detached, and magnified.

This fine variety of the Many-spiked Ixia was introduced to our collections from the Cape of Good Hope, about the year 1795, with the Reflex-flowered Ixia and many others, in bulbs, communicated by J. Pringle, Esq. to Messrs Lee and Kennedy, Hammersmith; where our drawing was taken in April 1799. No particular care is required, for the culture or increase of this, other, than what is required for the generality of Cape Ixias.



PLATE CXXIX.

GLORIOSA SUPERBA.

Superb Gloriofa.

CLASS V. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX nullus.

COROLLA. Petala fex, oblongo-lanceolata, undulata, longissima, totaliter reflexa.

STAMINA. Filamenta fex, fubulata, corolla breviora, recto-patula. Antheræ incumbentes.

PISTILLUM. Germen globosum. Stylus filiformis, staminibus longior, inclinatus. Stigma triplex, obtusum.

Pericarpium. Capfula ovalis, triloba, trilocularis, trivalvis.

Semina plura, globosa, baccata, duplici ferie disposita.

Obs. Affinis Erythronio.

EMPALEMENT, none.

BLOSSOM. Petals fix, oblong-lance-shaped, waved, very long, totally bent back.

CHIVES. Six threads, awl-shaped, shorter than the blossom, spreading out at straight angles from the seed-bud. Tips sideways on the threads.

POINTAL. Seed-bud globular. Shaft threadfhaped, longer than the threads, inclined. Summit triple, blunt.

SEED-VESSEL. Capfule oval, three-lobed, three-celled, three-valved.

SEEDS many, globular, like berries, disposed in two rows.

Obs. The genus has an affinity to Erythronium, or Dog's-tooth Violet.

SPECIFIC CHARACTER.

Gloriosa foliis cirrhiferis.

|| Gloriofa with tendril-bearing leaves.

REFERENCE TO THE PLATE.

- 1. A leaf of the Blossom, with its Chive, as they are fixed together at the base.
- 2. The Seed-bud, Shaft and Summit; the petals of the bloffom being cut off.

The Gloriofa fuperba, a native of Guinea, as well as the coast of Malabar in the East Indies, is said to be every part poisonous. It is herbaceous, and the roots, which are formed upon the decay of the old one, should be taken from the pot in November, and kept in dry sand till the end of February, when they must be planted in rich earth, composed of one part old rotten dung, and two parts least mould or peat earth, then plunged in the bark-bed of a hot-house which is kept at pine heat, to insure their flowering the ensuing August.

Having received a most beautiful branch, of this magnificent plant from the collection of the Hon. the Marchioness of Rockingham, at Hillingdon, near Uxbridge; the impulse was too strong to be resisted, of giving a figure of it in the Bot. Rep. although against our general proposals, as this is certainly, neither a new, or rare plant; having been introduced so early as 1690, by Mr. Bentick. We therefore beg the indulgence of our friends, in this instance; for although the flower is common, and there are many figures of it, in different works, as, Rheede's Hort. Malab. Vol. 7. frut. scand. 107. t. 57. Plukenet's alma. 249. t. 116. f. 3. Commelin's hort. 1. p. 69. t. 35. &c. &c.; yet, as these may not be in the possession of many of the purchasers of our work, we hope it may prove agreeable.



Gloriosa superba

" we we save here Beauty from ")

PLATE CXXX.

CERBERA UNDULATA.

Waved-leaved Cerbera.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum, acuminatum; foliolis ovato-lanceolatis.

COROLLA monopetala, infundibuliformis; tubus clavatus; limbus magnus, quinquepartitus; laciniis obliquis, obtufis, latere altero magis gibbis; os tubi quinquangulare, quinquedentatum, stellato-connivens.

STAMINA. Filamenta quinque, subulata, in medio tubi. Antheræ erectæ, conniventes.

PISTILLUM. Germen fubrotundum. Stylus filiformis, brevis. Stigma capitatum, bilo-

Pericarpium. Drupa maxima, fubrotunda, carnofa, a latere fulco longitudinali excavata, punctifque duobus.

SEMEN. Nux bilocularis, quadrivalvis, retufa.

EMPALEMENT. Cup five leaved, tapering to a point; leaflets between egg and lanceshaped.

BLOSSOM one petal, funnel-shaped; tube clubshaped; border large, five divisions; segments oblique, obtuse, thicker edged on one fide; mouth of the tube five-angled, five toothed, approaching together in the form of a ftar.

CHIVES. Five threads, awl-shaped, in the middle of the tube. Tips upright, and ap-

POINTAL. Seed-bud roundish. Shaft threadfhaped, and fhort. Summit headed, two-

SEED-VESSEL. A large pulpy fruit, nearly round, fleshy, hollowed on the fide by a longitudinal furrow, and with two punctures.

SEED. Nut two cells, four valves, and bluntly dented at the end.

SPECIFIC CHARACTER.

Cerbera foliis lanceolatis, utrinque attenuatis, undulatis; cymis ramofis, divaricatis, axillaribus.

Cerbera with lance shaped leaves tapered to both ends, and waved; tufts of flowers branching into various directions, and growing from the foot-stalks of the leaves close to the ftem.

REFERENCE TO THE PLATE.

1. The Empalement, magnified.

The Bloffom cut open, with the Chives as they stand in the tube, magnified.
 The Empalement, with the pointal after the bloffom has fallen off, magnified.

4. The Seed-bud, magnified.

This conspicuously handsome plant was introduced by W. Forsyth, Esq. to the Chelsea Gardens in the year 1782, from the island of Bourbon, now the Isle de la Revolution, near the coast of Madagascar, in the Indian Ocean. It grows to a very confiderable height, perfectly straight, and polished in the ftem, fomething like the Bamboo Cane, from which appearance, till it flowered, it had gone by the name of the fishing rod plant. It must be kept in the bark-bed of the hothouse in rich mould, and should be removed from its pot but feldom, the roots being extremely tender and brittle. The propagation is flow and difficult, as well from the great tendency the part has to rot, where cut, as from the unfrequency of its throwing out any fide shoots from the stem. Our drawing was made in July this year, at the Hammersmith nursery; though we understand it flowered in the extensive collection of the Right Hon. the Earl of Tankerville at Walton-upon-Thames, some years fince.

Having followed Willdenow, rather than Jacquin, in the Generic name of this plant, our reason is, each species which has hitherto been thrown to this Genus, fince its first formation, might well make a distinct one; if every generic or even essential, character, was to be critically attended to. The fruit forming the principal effential character, a specimen of which we have seen, containing two large feeds like C. Manghas, determined us in our adoption.

The descriptions and figures of the two plants, given by Professor Jacquin in his Icon. rar. 2, and Collect. 4, under the genus Ochrofia, are, we conceive, only different specimens of our plant; and are both, as well as Dryander's critique on Gmelin (fee Linn. Tranf. Vol. II. p. 227) defective; neither of them having feen but dried specimens, without the fruit; as in this natural order of plants, the flowers being mostly sleshy, many of the principal characters are destroyed in the process of drying; and of course, in such case, must lead to error. Jacquin's character of maculata, quoted by Willdenow as a specific title, though he has rejected the Generic, we suppose, must have been taken from the small blotches on the lower, and which fometimes pervade the upper furface of the leaves, but found only when in the last state of decay, or when artificially dried to preserve them; as by the pressure necesfarily employed to that end, the waved, and most oftensible character of the living plant, is done away. As to the C. parviflora of Forster being the same, as either, the Ochrosia borbonica or O. maculata of Jacquin, we must beg leave to dissent from the severe criticiser of Gmelin; upon whose authority, nevertheless, Willdenow has been led to exclude, even as a synonim, the O borbonica of Prof. Jacquin, which perhaps, if it were not for the increasing of Genera, ought to be the name of the plant.



PLATE CXXXI.

GERANIUM LACINIATUM.

Ragged-leaved Geranium.

CLASS XVI. ORDER IV. of Suppl. Suftem. Veg. 1781.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. Fructus roftratus, penta-coccus. ONE POINTAL. Five Summits. Fruit furnished with long awns, five dry berries.

See Geranium Grandiflorum, Pl.XII. Vol.I.

SPECIFIC CHARACTER.

Geranium foliis radicalibus, integris laciniatifque, petiolis filiformibus; calycibus monophyllis; Staminibus quinque fertilibus; radice tuberofa. Geranium with leaves growing from the root, entire and jagged, foot-stalks thread-shaped; cups one leaved; five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

- 1. The Empalement, with its tubular part laid open.
- 2. The Chives and Pointal, as they stand in the blossom, magnified.
- 3. The fame cut open, and detached from the Pointal, magnified.
- 4. The Pointal, magnified.

THE Ragged-leaved Geranium may be confidered as an herbaceous plant, for it rarely retains its leaves longer than September; and when in a state of inaction, should be watered but sparingly, otherwise the root will be subject to rot. It may be increased by parting the roots about March, which should be afterwards planted in rich mould, and placed on a shelf in the hot-house; where they will flower in May or June. From an imported plant, in the Hibbertian collection, our drawing was made this year.

A continual harping on the same subject, may perhaps appear rather tiresome; but, as almost every real new species of Geranium, which falls under our observation, seems to add a fresh proof of the sutility of the new arrangement, we cannot forbear noticing it. This species, for instance, has every other essential generic character of Monsieur L'Heritier's Pelargonium, but unfortunately the most essential. Upon an accurate examination of a number of flowers, before they had expanded, (the only time when it can be truly ascertained), in no one instance, was there more than five tips to be found. Where to place it, with Erodium, or Pelargonium?



Geranium Caciniatum

by He Andrews & Wing hertige

PLATE CXXXII. PROTEA LONGIFOLIA. Nigra.

Long-leaved Protea. Black flower.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida seu 4-petala. Antheræ lineares, insertæ petalis insra apicem. Calyx proprius nullus. Semina solitaria.

BLOSSOM 4-cleft or 4 petals. Tips linear, inferted into the petals below the point. Cup proper, none. Seeds folitary.

See PROTEA FORMOSA, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis fublinearibus, angustis, obliquis, rigidis, longissimis; squamis interioribus, calycis lanceolatis, erectis; slorum plumis atro-purpureis. Protea with leaves nearly linear, narrow, oblique, harsh and very long; the inner scales of the cup are lance-shaped and upright; the plume of flowers of a black-purple.

REFERENCE TO THE PLATE.

- 1. A Blossom complete, with the seed-bud attached.
- 2. The Petals of the flower opened, to shew the fituation of the Tips.
- 3. The Seed-bud, Shaft and Summit.

This species of Protea, from the Cape of Good Hope, of which we have drawings of three varieties, is as yet, very scarce in this kingdom. The variety here figured, as well as the others of this species, have been hitherto considered as varieties of P. speciosa; with which, however, they have less connexion, than with P. mellifera; but from both they stand quite distinct. Wherefore, we have given them the specific title of longisolia, from the extreme length of their leaves, which are considerably longer, than could be expressed in the sigure. We believe this is the first year it has slowered in England, or in any other collection, than the nursery, Hammersmith; where our drawing was made in November. It is most difficult, or indeed almost impracticable, to increase it, as it puts out no side shoots, and certainly damps off, if laid down, where it touches the earth.

From Boerhaave's having arranged this species of Protea, (See his Index to the Leyden Garden, Part 2. from P. 185 to 189,) with his Lepidocarpodendrons, after fig. 187. which is our P. mellifera; Willdenow has been led into an error; fince he has given this plant, the 188 Fig. of Boerhaave, as a synonim to P. speciosa, which ought not to be so taken, unless we understand, that he meant all his Lepidocarpodendrons as only varieties of each other; the principal distinguishing feature, in P. speciosa, being the incurved and fringed character, of the inner scales of the empalement.



Protea longefolia nigne

Pub as the But De rate Jun 1 so

PLATE CXXXIII.

PROTEA LONGIFOLIA. Ferruginoso-purpurea.

Long-leaved Protea. Rusty-purple flower.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida seu 4-petala. Antheræ lineares, insertæ petalis infra apicem. Calyx proprius nullus. Semina solitaria.

BLOSSOM 4-cleft or four petals. Tips linear inferted into the petals below the point. Cup proper none. Seeds folitary.

See PROTEA SPECIOSA. Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis fub-linearibus, angustis, obliquis, rigidis, longissimis; squamis interioribus calycis lanceolatis erectis; slorum plumis ferruginoso-purpureis; conus subglobosus.

Protea with nearly linear leaves, narrow, oblique, harsh and very long; the inner scales of the cup are lance-shaped and upright; the plume of flowers are of a rusty-purple; the cone nearly globe-shaped.

REFERENCE TO THE PLATE.

1. A Bloffom complete, with the feed-bud attached.

2. The Petals of the flower fpread open, to expose the fituation of the Tips.

3. The Seed-bud, Shaft and Summit.

That the attention of the scientific and other collectors and cultivators of exotics, in this kingdom, may be brought to a better acquaintance, with this fine, very extended, yet much neglected Genus; the species of which, now in Britain, amount to more than seventy, has been our chief aim, in endeavouring to lay before them, sigures of some of the most rare and beautiful; one of which we deem the present.

This variety of Long-leaved Protea, is figured in Boerhaave's Index to the Leyden garden, Part 2. p. 186, as one of his Lepidocarpodendrons, and has been given, by Willdenow in his Sp. plant. Tom. I. p. 531. as a fynonim of P. speciosa, quoted from Thunberg's prod. 27. Dist. de Prot.

The culture and treatment of this plant, is the same as P. speciosa, to which we refer our readers. From a fine plant, in the Hibbertian collection, our drawing was taken in the month of July this year. It was introduced to us from the Royal Gardens at Schonbrun in Germany, communicated by the superintendant to Messrs. Lee and Kennedy, Hammersmith, the seeds having been received from the collector for the Emperor, at the Cape.



PLATE CXXXIV.

IXIA CROCATA. Var. nig. maculata.

Crocus flowered Ixia. Var. black spotted.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis. STAMINA tria, erectiusculo-patula.

BLOSSOM 6-petals, spreading, equal.

CHIVES three, upright and spreading.

See IXIA REFLEXA. Pl. XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia foliis falcatis, flaccidis; floribus alternis, feffilibus; petalis tribus exterioribus bafi gibbis maculatifque.

Ixia with fcimitar-shaped limber leaves; flowers grow alternate and close to the stem; the three outer petals are gouty and spotted at the base.

REFERENCE TO THE PLATE.

- 1. The two Spaths of the Empalement.
- 2. The Flower cut open and expanded, with the Chives attached.
- 3. The Seed-bud, Shaft and Summits, the Summits detached and magnified.

This variety of Crocus-flowered Ixia was introduced, according to the Kew Catalogue, Vol. I. p. 60, in the year 1774, by Mr. F. Maffon, from the Cape of Good Hope, and there, is treated as a diffinct fpecies, under the name of I. deufta. From the number of drawings we possess of this tribe of plants, having nineteen distinct varieties of this one species, and in the close investigation we have given them, in their flowering, for a number of years; having found them to sport in colour, &c. from the same root, but much more so from seed; enables us decisively to place this plant as a variety to I. crocata. It is one of the most hardy of the Genus, and propagates itself by the root. The flowers are produced about May, in which month 1799, our drawing was taken, at the Hammersmith nursery; since, we have not seen it in any collection; which leads us to think it is not a free blower, as the roots are not scarce.

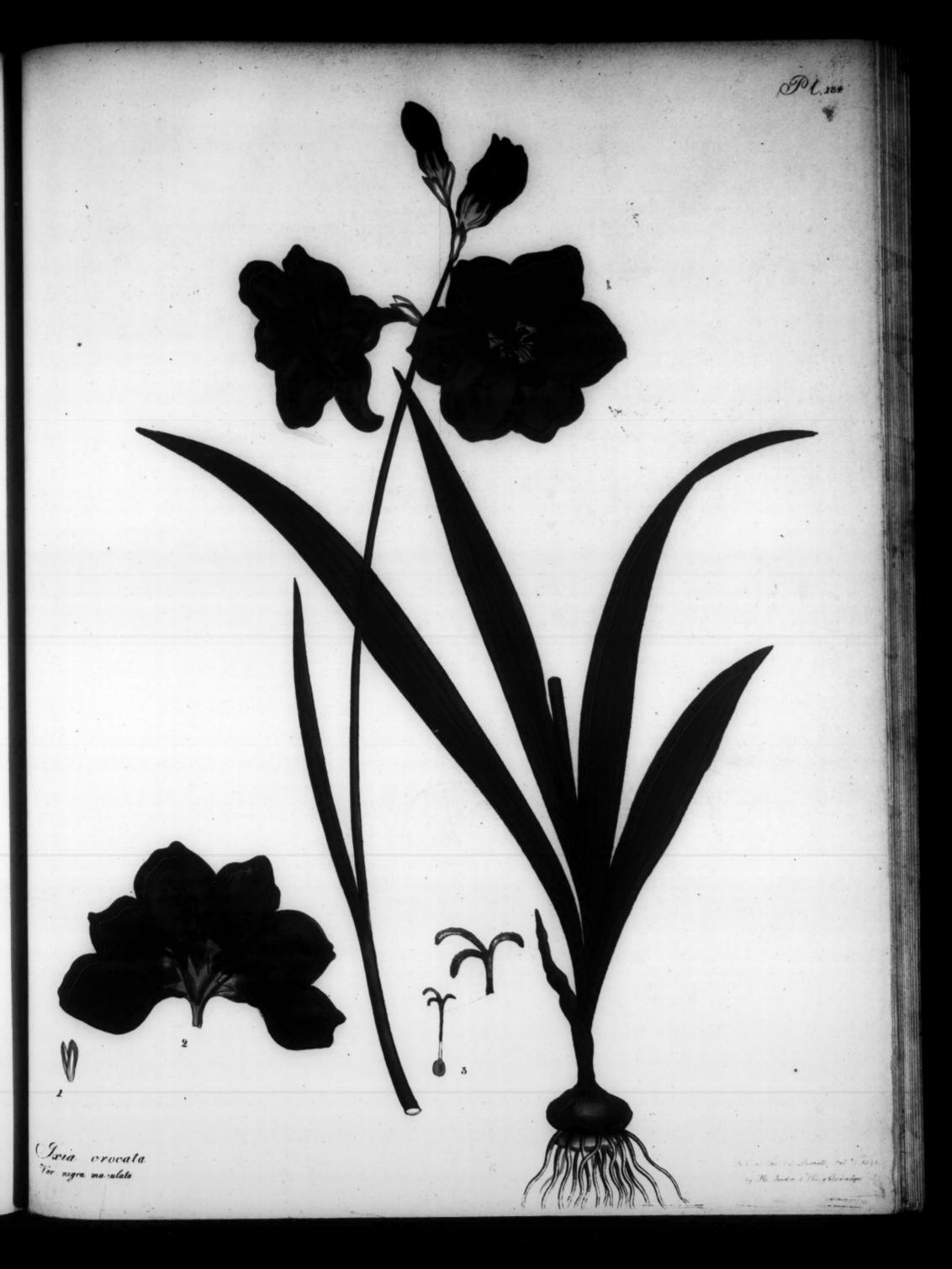


PLATE CXXXV.

MALVA REFLEXA.

Reflex-flowered Mallow.

CLASS XVI. ORDER VI. of Schreb. Gen. Plant. 1789.

MONADELPHIA POLYANDRIA. Threads united. Many Chives.

GENERIC CHARACTER.

CALYX. Perianthium duplex; exterius triphyllum, angustius; foliolis cordatis, acutis, perfistentibus; interius monophyllum, semiquinquesidum, majus, latius, persistens.

COROLLA. Petala quinque, obcordata, præmorfa, plana, tubo ftaminum bafi affixa.

STAMINA. Filamenta numerofa, infernè coalita in tubum, in hujus apice et fuperficie fecedentia et libera. Antheræ reniformes.

PISTILLUM. Germen orbiculatum. Stylus cylindraceus, brevis. Stigmata plurima, fetofa, longitudine ftyli.

Pericarpium. Capfula fubrotunda, composita e loculamentis pluribus, (tot quot stigmata) bivalvibus, virticillatim inarticulatis circum receptaculum columnare, tandem dilabentibus.

Semina folitaria, rarius duo feu tria, reniformia.

EMPALEMENT. Cup double; the outer threeleaved, narrower; leaflets heart-shaped, sharp, and remaining; the inner one-leaf, half five-cleft, larger, broader, and remaining.

BLOSSOM. Five petals, inverfely heart-shaped, appearing bit at the ends, flat, fixed to the tube of the chives at the base.

CHIVES. Threads numerous, united below into a tube, at its top and furface parted and loofe. Tips kidney-shaped.

POINTAL. Seed-bud orbicular. Shaft cylindrical and short. Summits many, briftleshaped, the length of the shaft.

SEED-VESSEL. Capfule roundish, composed of many cells (as many as there are tips) two-valved, forming a whorl round a columnar receptacle not jointed, at length falling off.

SEEDS folitary, feldom two or three, kidneyshaped.

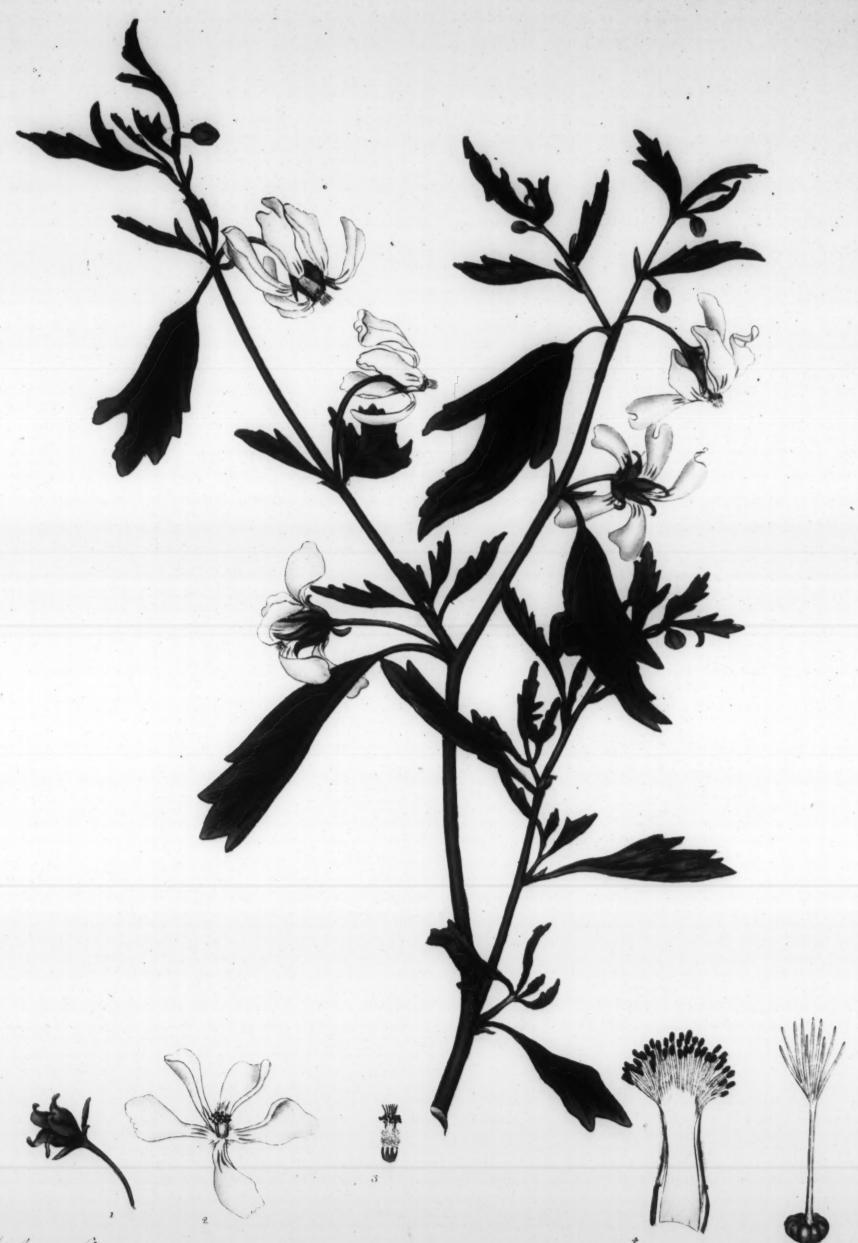
SPECIFIC CHARACTER.

Malva foliis cuneiformibus, inequaliter incifolobatis; petalis reflexis. Mallow with wedge-shaped leaves, unequally gashed into lobes; petals reflexed.

REFERENCE TO THE PLATE.

- The Empalement, the inner and outer Cup feparated from the Bloffom.
- 2. A Bloffom fpread open.
- 3. The Chives and Pointal.
- 4. The Chives, the connecting tube cut open.
- 5. The Seed-bud, Shaft and Summit, magnified.

Some light doubts, at first, arose in our minds, that this plant might be M. virgata, the 15th in Professor Martyn's new arrangement of Miller's Dictionary, vide art. Malva. But, from the extraordinary length of the branches of M. virgata, there described to be fix feet and a half long, and only the thickness of a wheat straw at the base! with dark purple flowers; we cannot but consider this, which never rises to more than a foot and a half or two feet in the stem, with white flowers, excepting a small streak of red at the base of the petals, as a distinct and new species. It is a native of the Cape, and was received in feeds, from thence, in the year 1794. As a hardy green-house plant it is most ornamental; the blossoms, which are quite reflexed when full blown, being produced in succession from March till November, upon every part of the plant. It is increased by cuttings made in May, and placed under a hand-glass on a shady border. Light leam with a small mixture of peat, is the best soil to make it flourish.



Malva reflexa

PLATE CXXXVI.

GERANIUM CRASSIFOLIUM.

Thick-leaved Geranium.

CLASS XVI. ORDER IV. of Suppl. System.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata 5. Fructus rostratus, penta-coccus.

ONE POINTAL. Five fummits. Fruit furnished with long awns, five dry berries.

See Geranium grandiflorum, Pl. XII. Vol. I.

SPECIFIC CHARACTER.

Geranium foliis acuminatis, lobato-pinnatis, subcarnosis, laciniis inequaliter dentatis; pedunculis subquadrisforis; sloribus pentandris; petalis æqualibus, purpureis. Geranium with leaves tapering to the point, winged in lobes and rather fleshy, the segments unequally toothed; foot-stalks generally four flowers; the flowers have five fertile tips; petals equal and purple.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. One Petal of the Bloffom.
- 3. The Chives and Pointal.
- 4. The Chives, fpread open.
- 5. The fame, magnified.
- 6. The Pointal, magnified.

The thick-leaved Geranium is a native of the island of Cyprus, and was introduced by Dr. Sibthorpe, on his return from visiting the Grecian islands, in the year 1788. It is, we think, no more than a biennial plant at best, as it seldom survives the second winter, and but rarely the first. If the seeds are sown in the month of March, the plants will slower the ensuing autumn, and generally produce ripe seeds, if kept in a sheltered and warm situation. This plant is unquestionably the true Erodium of L'Heritier, and those who admit of that innovation, being the one, apparently, upon which he formed his Generic distinction; as we believe, no other species, so denominated, has every constituent Essential part necessary to his Genus.



PLATE CXXXVII.

GLADIOLUS NANUS.

Dwarf Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fexpartita, ringens. Stamina adfcendentia.

BLOSSOM fix divisions, gaping. Chives ascending.
See GLADIOLUS ROSEUS. Plate XI. Vol. I.

SPECIFIC CHARACTER.

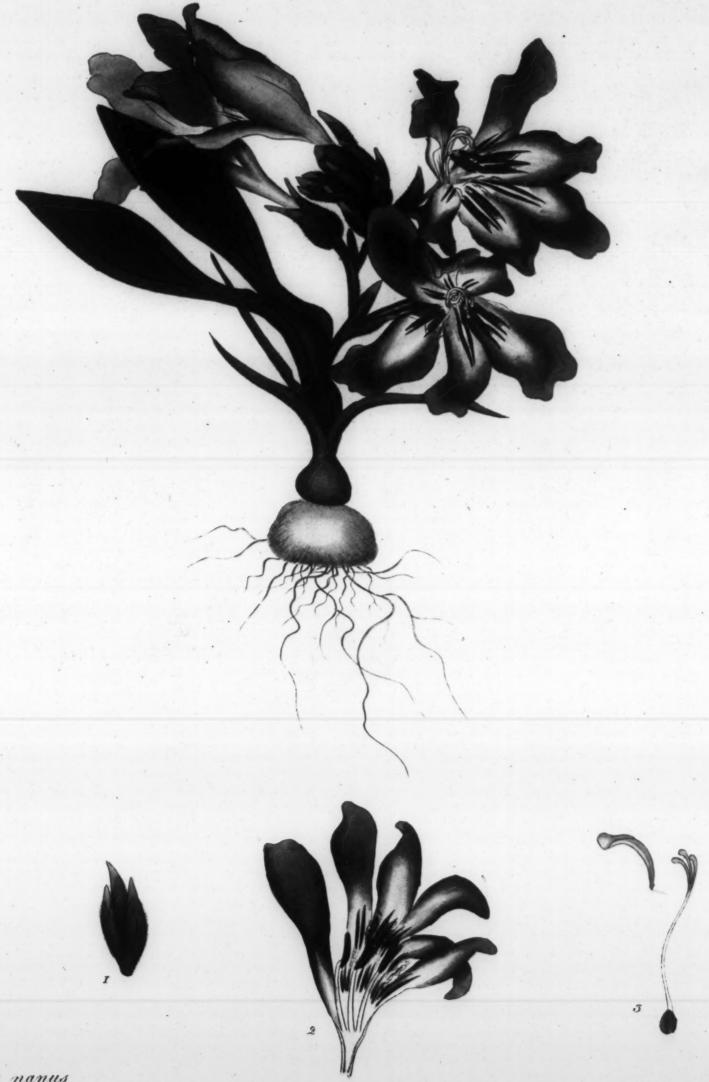
Gladiolus foliis lanceolatis, plicatis, pilofis; scapo toto florigero longitudine foliorum; corolla ringente, laciniis longissimis, divaricatis, undulatis; spatha trivalvi.

Gladiolus with lance-fhaped leaves, plaited and hairy; flower-ftem quite covered with flowers the length of the leaves; bloffom gaping, the fegments very long, spreading different ways and waved; sheath three valved.

REFERENCE TO THE PLATE.

- 1. The three valved Sheath.
- 2. A Blossom cut open and expanded, the Chives remaining attached.
- 4. The Seed-bud, Shaft and its Summits, one of them detached and magnified.

The Hibbertian collection has furnished us with this extraordinarily handsome Gladiolus. Our drawing was taken at Clapham, in August this year, when we were informed by Mr. Hibbert that he had received the bulbs but a few months before, from his collector at the Cape. It has little likeness to any one of the Genus yet in England; but from the character of the leaves, we should incline to think, the treatment required for Ixia plicata, (of which species we have drawings of more than twenty varieties, known under the names of I. villosa, I. rubro-cyanea, I. punicea, I. purpurea, &c. &c.) that is to say, to be kept through the winter months, in more heat than is required for the generality of Ixias and Gladioluses.



Gladiolus nanus

by HO Radious & De

PLATE CXXXVIII.

VACCINIUM AMOENUM.

Broad-leaved Whortle-berry.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX superus. Corolla monopetala.

FILAMENTA receptaculo inferta. Bacca quadrilocularis, polyfperma.

Cup superior. Blossom one petal.

Threads fixed into the receptacle. A Berry with four cells and many seeds.

See Vac. Arctostaphyllos, Pl. XXX. Vol. I.

SPECIFIC CHARACTER.

Vaccinium foliis utrinque acuminatis, fubserrulatis, deciduis; floribus racemosis, pedunculis bracteatis, calycibus reflexis, corollis cylindraceis. Stamina decem. Whortle-berry with leaves tapering to both ends, a little fawed at the edges and falling off; flowers grow in long bunches, foot-stalks with floral leaves, cups reflexed, blossoms cylinder-shaped. Ten Chives.

REFERENCE TO THE PLATE.

- 1. A Flower complete.
- 2. The Empalement, with the floral leaves.
- 3. The Chives, magnified.
- 4. The Shaft and its Summit, magnified.
- 5. A nearly ripe Berry.
- 6. The fame, cut transversely, magnified.

This very handsome species of Whortleberry was introduced, from North America, in the year 1765, by Mr. John Cree, Nurseryman, of Addlestone, amongst many others. It is a hardy plant, in our climate. This species inclines to a loamy, rather than a peat soil, and is propagated by suckers, which it throws up from the root, or from layers; which may be put down in May, and taken off the succeeding year. Its time of flowering is about June or July, in which latter month our drawing was made last year, at Messrs. Lee and Kennedy's, Hammersmith.



PLATE CXXXIX.

STRUTHIOLA CILIATA. Var. flore rubro.

Fringed-leaved Struthiola. Var. red flowered.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Perianthium diphyllum. Corolla tubulofa, 4-fida; Nectarium, glandulæ octo fauci circumpofitæ.

SEMEN unum, fubbaccatum.

Cup two-leaved. Bloffom tubular, 4-cleft; Honey-cup, 8 glands placed round the mouth of the bloffom.

ONE SEED, like a berry. See STRUTHIOLA IMBRICATA, Pl. CXIII. Vol. II.

SPECIFIC CHARACTER.

Struthiola foliis ovato-lanceolatis, mucronatis, ciliatis, concavis, quadrifariam imbricatis; glandulæ octo fupra faucem; corolla rubra

Struthiola with leaves between egg and lancefhaped, pointed, fringed, concave and tiled in four rows; eight glands upon the mouth of the bloffom, which is red.

REFERENCE TO THE PLATE.

- 1. A leaf, natural fize, from one of the younger branches.
- 2. A Blossom, with its Cup, or floral leaves.
- 3. The Cup, magnified.
- 4. A Bloffom cut open, and magnified.
- 5. The Seed-bud, Shaft, and Summit, magnified.

THE two varieties of this species of Struthiola, the other with a white flower being intended for our next number, were introduced at the same time with the Struthiola imbricata, to which they much affine, in general habit. But, the strong distinction in the number and character of the glands, induced us to consider them of a distinct species; in this, they are eight, in S. imbricata there are but four; the leaves likewise not so closely set upon the stem, and they are much more fringed. For the culture and treatment of this, we must refer our readers to the directions, for managing the above named plant. We had our specimen, for the figure, from the Clapham collection in May 1800.

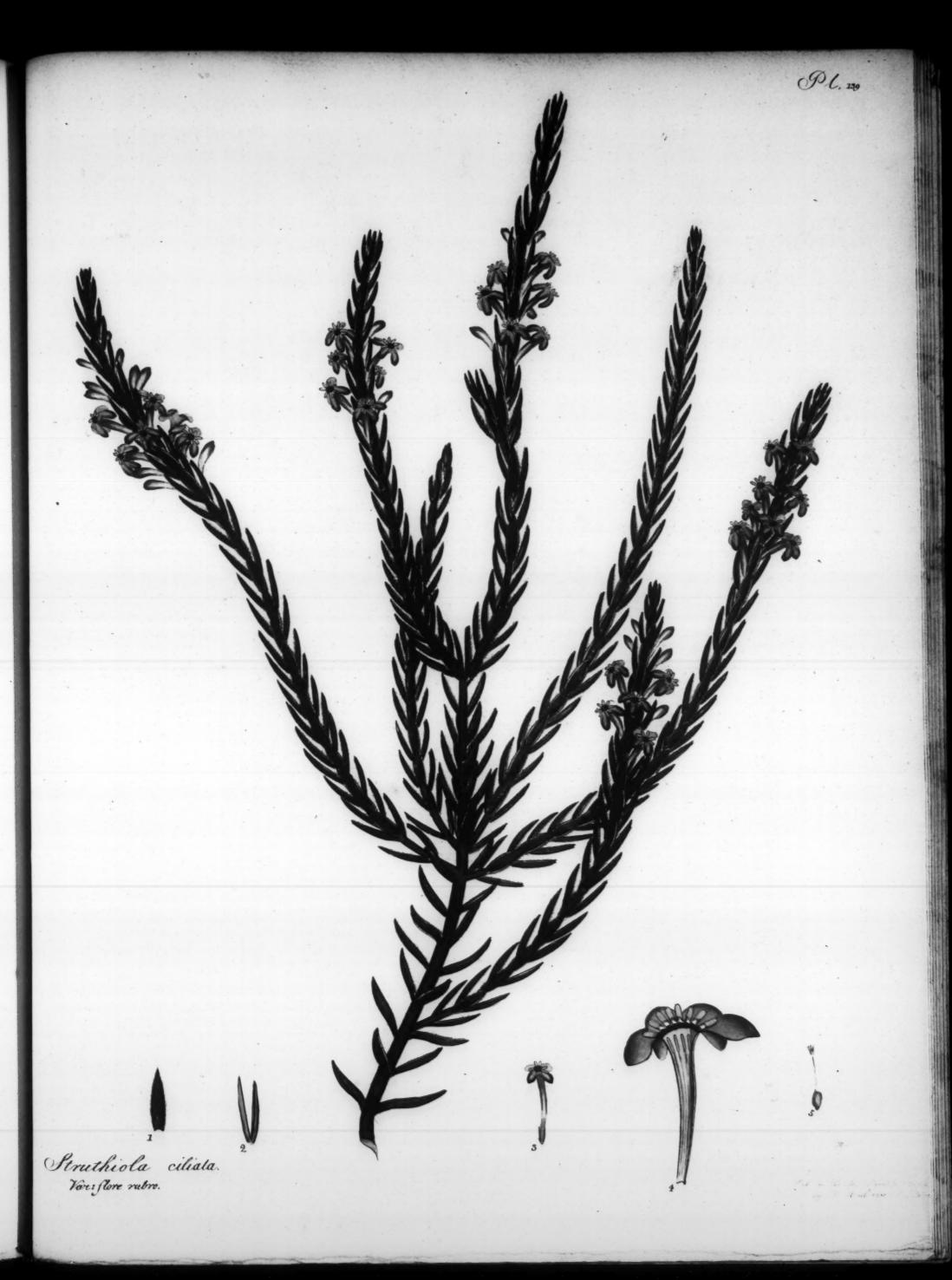


PLATE CXL.

VACCINIUM FRONDOSUM.

Obtuse-leaved Whortle-berry.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX fuperus. Corolla monopetala. Filamenta receptaculo inferta. Bacca quadrilocularis, polyfperma.

Cup superior. Blossom one petal. Threads fixed into the receptacle. A berry with four cells and many seeds.

See Vac. arctostaphyllos, Pl. XXX. Vol. I.

SPECIFIC CHARACTER.

Vaccinium racemis foliofis; pedicellis bracteatis; corollis campanulatis; foliis obtufis, oblongis, fubtus fub-glaucis, deciduis. Stamina decem. Whortle-berry with small leaves on the flowerstems; foot-stalks of the flowers with leaflets; blossoms bell-shaped; leaves, obtuse, oblong, rather glaucous underneath and deciduous. Ten Chives.

REFERENCE TO THE PLATE.

- 1. The Empalement, natural size.
- 2. The Chives and Pointal, magnified.
- 5. A nearly ripe Berry cut transversely.

The Obtuse-leaved Whortle-berry was introduced, according to the Kew Catalogue, Vol. II. p. 12, from North America, in the year 1770 by Mr. William Young; but nevertheless, although said to be an inhabitant of our gardens so long as 20 years, it is, we believe, known to very sew cultivators. It is a deciduous shrub, growing to the height of about two or three seet; and will, in general, survive the inclemency of our winters.

It is increased with difficulty by layers, and the berries seldom ripen with us; light peat earth, with a small mixture of loam, it thrives in most. The drawing for our figure was taken, from the Hibbertian collection, in July 1800. This species has likewise ten Chives, five divisions of the cup, &c.



Laccinium frondosum

PLATE CXLI. CYANELLA CAPENSIS.

Cape Cyanella.

CLASS VI. ORDER I. HEXANDRIA MONOGYNIA Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX nullus.

COROLLA. Petala sex, unguibus cohærentia, oblonga, concava, patula; tribus interioribus propendentibus.

STAMINA. Filamenta sex, basi contigua, brevissima, patentiuscula; infimo declinato. Antherarum quinque oblongæ, curvatæ, erecæ, apice dehiscentes, dentibus quatuor obtus; altera vero declinata, maxima, apice bisida.

PISTILLUM. Germen trigonum, obtusum. Stylus filiformis, declinatus, longitudine infimi staminis. Stigma acutiusculum.

Pericarpium. Capfula fubrotunda trifulcata, trilocularis, trivalvis. Semina plura, oblonga. EMPALEMENT, none.

BLOSSOM. Six petals, adhering by the claws, oblong, concave, spreading; the three interior ones hanging forwards.

CHIVES. Threads fix, contiguous at the base, very short, spreading a little; the lower one bent down. Five of the tips are oblong, curved, upright, splitting at the end, with four obtuse teeth; but the other is bent down, very large, and two-cleft at the end.

Pointal. Seed-bud three-fided, obtuse. Shaft thread-shaped, bent downward, and the length of the lower chive. Summit rather sharp-pointed.

SEED-VESSEL. Capfule roundish, three-furrowed, three cells, three valves.

SEEDs many, oblong.

SPECIFIC CHARACTER.

Cyanella caule foliofo, paniculato; racemis divaricatis; foliis lanceolatis, undulatis; floribus cæruleis.

Cyanella with a leafy stem growing into a panicle; branches straddling; leaves lanceshaped, and waved; flowers blue.

REFERENCE TO THE PLATE.

- 1. The Chives and Pointal, natural fize, the petals of the bloffom cut away.
- 2. The Chives and Pointal, magnified.
- 3. The same thrown open, to shew their connection at the base.
- 4. The Pointal and Seed-bud, magnified.

The Cape Cyanella has been long known in many herbariums, and to most botanists by name, but we much question whether a living plant has, till now, been seen in our gardens. The description, in his dictionary, of a plant cultivated by Miller in 1768, where he says, "the leaves are long, narrow, "with a groove on the upper side, the peduncle arising immediately from the root, supporting one flower, of a fine blue colour; surely can have no connection with our plant, but in the colour of its blossom. From every appearance of the plant, even in an abortive specimen, more than one flower must be produced, if any. It is enumerated, in the Kew Catalogue, as one of the species of Cyanella; but, we suppose, only from an accepted idea, that the plant described by Miller was the C. capensis; and, as having been cultivated in Britain, might be therefore introduced with propriety into the book, though it had never graced the garden; otherwise, if this plant, which is incontestibly the true C. capensis of Linnæus, had ever been seen in the Royal Gardens, no affinity would have been traced to that of Miller.

A few small inaccuracies occur in the generic character of this Genus, which we have rectified; one is, that the inner, and not the outer petals, are those which hang forward; the others may be observed by those, who may consider them worthy notice. This species is a bulbous-rooted plant, flowering freely in the green-house; although the roots had been received, late in the season, from the collector for the Hibbertian Collection now at the Cape; which, perhaps, is the reason the flowers are produced at this time of the year (February). Mr. Allen informs us, that, it has had no other treatment, than what is given to Cape bulbs in general. From the swelled appearance of the seed-vessels we have little doubt of ripe seeds being produced.



PLATE CXLII.

GLADIOLUS CRISPUS.

Curled-leaved Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fexpartita, ringens. Stamina adfcendentia.

BLOSSOM fix divisions, gaping. Chives ascending.
See GLADIOLUS ROSEUS. Plate XI. Vol. I.

SPECIFIC CHARACTER.

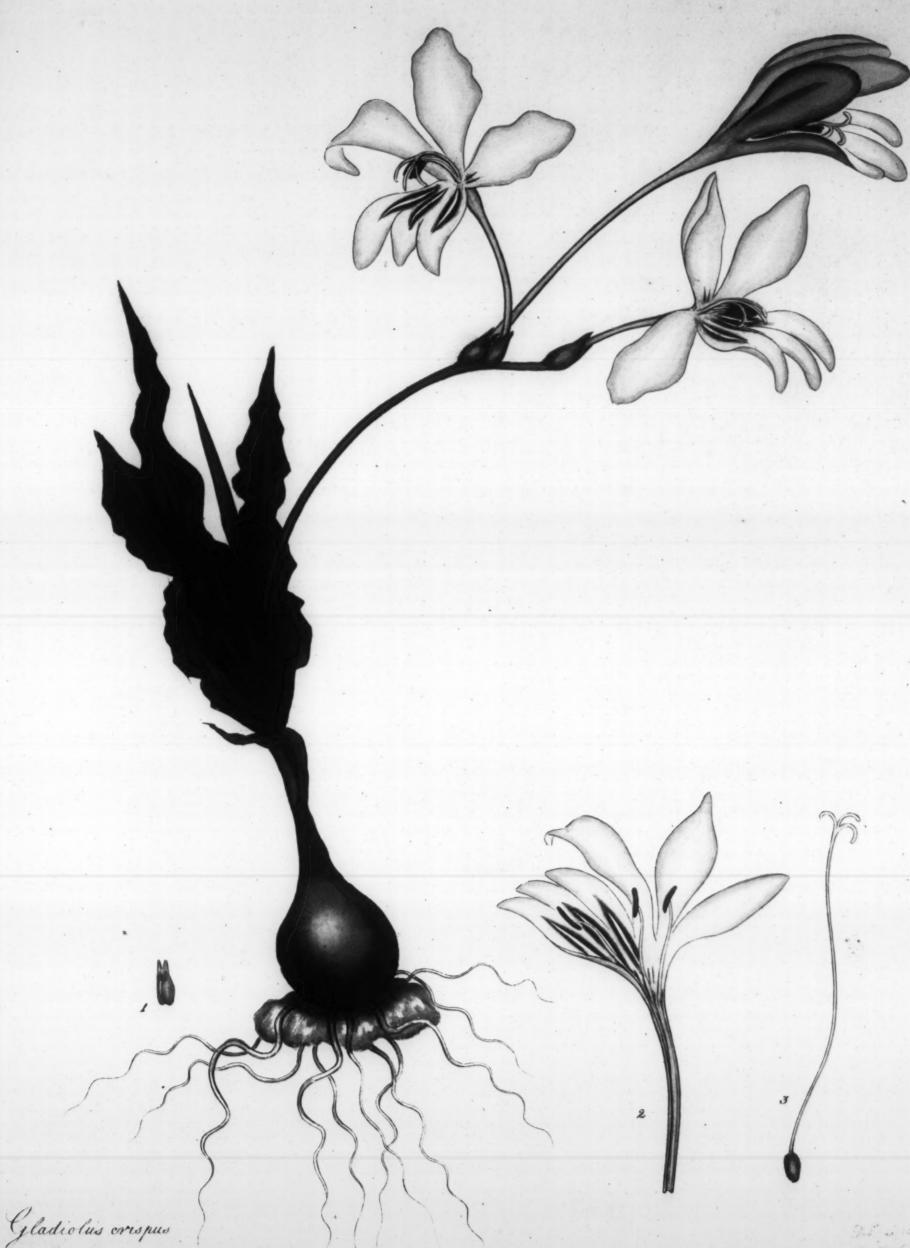
Gladiolus foliis enfiformibus, ad oras crifpus; floribus fecundis, palidè rubris; laciniis corollæ rotundatis; tubo gracili, longiffimo.

Gladiolus with fword shaped leaves, curled at the edges; flowers point all one way, and are of a pale red; segments of the blossom rounded; tube slender, and very long.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. A Flower cut open, the Chives remaining attached.
- 3. The Seed-bud, Shaft, and Summit.

A Figure of this Gladiolus may be found in the Ic. rar. 2. of Professor Jacquin, t. 267, by those who possess that elegant and invaluable work. The plant from which our drawing was taken, and we believe the first that has been seen in Britain, slowered in the collection of G. Hibbert, Esq. Clap ham Common, last year in the month of July. We do not perceive that the treatment of this plant, should differ from the rest of its congeners.



Got us the Sou Down Much

PLATE CXLIII.

LIMONIA TRIFOLIATA.

Three-leafletted Limonia.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, tri-feu quinquefidum, acutum, minimum, perfiftens.

COROLLA. Petala tria ad quinque, oblonga, obtufa, erecta, apice patentia.

STAMINA. Filamenta fex ad decem, fubulata, erecta, corolla breviora. Antheræ lineares, erectæ.

PISTILLUM. Germen oblongum, superum. Stylus cylindraceus, longitudine staminum. Stigma capitatum, planum.

Pericarpium. Bacca ovata seu globosa, trilocularis; dissepimentis membranaceis.

SEMINA folitaria, ovata.

EMPALEMENT. Cup one leaf, three or fivecleft, pointed, very fmall, and remaining.

BLOSSOM. Petals from three to five, oblong, obtufe, upright, fpreading at the end.

CHIVES. Threads from fix to ten, awl-shaped, upright, shorter than the blossom. Tips linear, and upright.

POINTAL. Seed bud oblong and fuperior. Shaft cylindrical, the length of the Chives. Summit headed, and flat.

SEED-VESSEL. An oval, or globular berry with three cells; partitions skinny.

SEEDs folitary, and egg-shaped.

SPECIFIC CHARACTER.

Limonia foliis ternatis; fpinis geminis, axillaribus. Limonia with leaves composed of three leaflets; fpines grow by pairs at the footstalks of the leaves close to the stem.

REFERENCE TO THE PLATE.

- 1. The Empalement, magnified.
- 2. The Chives and Pointal, magnified, as they fland in the Bloffom.
- 3. The Pointal natural fize.
- 4. The fame, magnified.
- 5. A ripe berry.
- 6. A Seed.

This plant, a native of China, has fince its introduction, as are most plants coming from thence, been cultivated with us as a hot-house plant; but from every natural affinity, we should be led to suppose it would endure our winters, in the green-house. As yet it is in few collections, and scarce; therefore, till it becomes more plenty, it will, most likely, not undergo that ordeal. Our drawing was taken from a branch in high perfection, communicated by Mr. Anderson, from the collection of J. Vere, Esq. Kensington Gore, last year 1800, in the month of July; who informs us, he has been enabled to propagate it by cuttings, and that he keeps it in a mixture of loam and rotten dung.



Limonia trifoliata

Public as the Most Sounds March 1 ich

PLATE CXLIV.

PROTEA LONGIFOLIA. Var. cono turbinato.

Long-leaved Protea. Var. top-shaped cone.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida seu 4-petala. Antheræ lineares, insertæ petalis infra apicem. Calyx proprius nullus. Semina solitaria.

BLOSSOM 4-cleft or 4 petals. Tips linear, inferted into the petals below the point. Cup proper none. Seeds folitary.

See PROTEA FORMOSA, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis sublinearibus, angustis, obliquis, rigidis, longissimis; squamis interioribus calycis lanceolatis, erectis; slorum plumis atro purpureis; conus turbinatus.

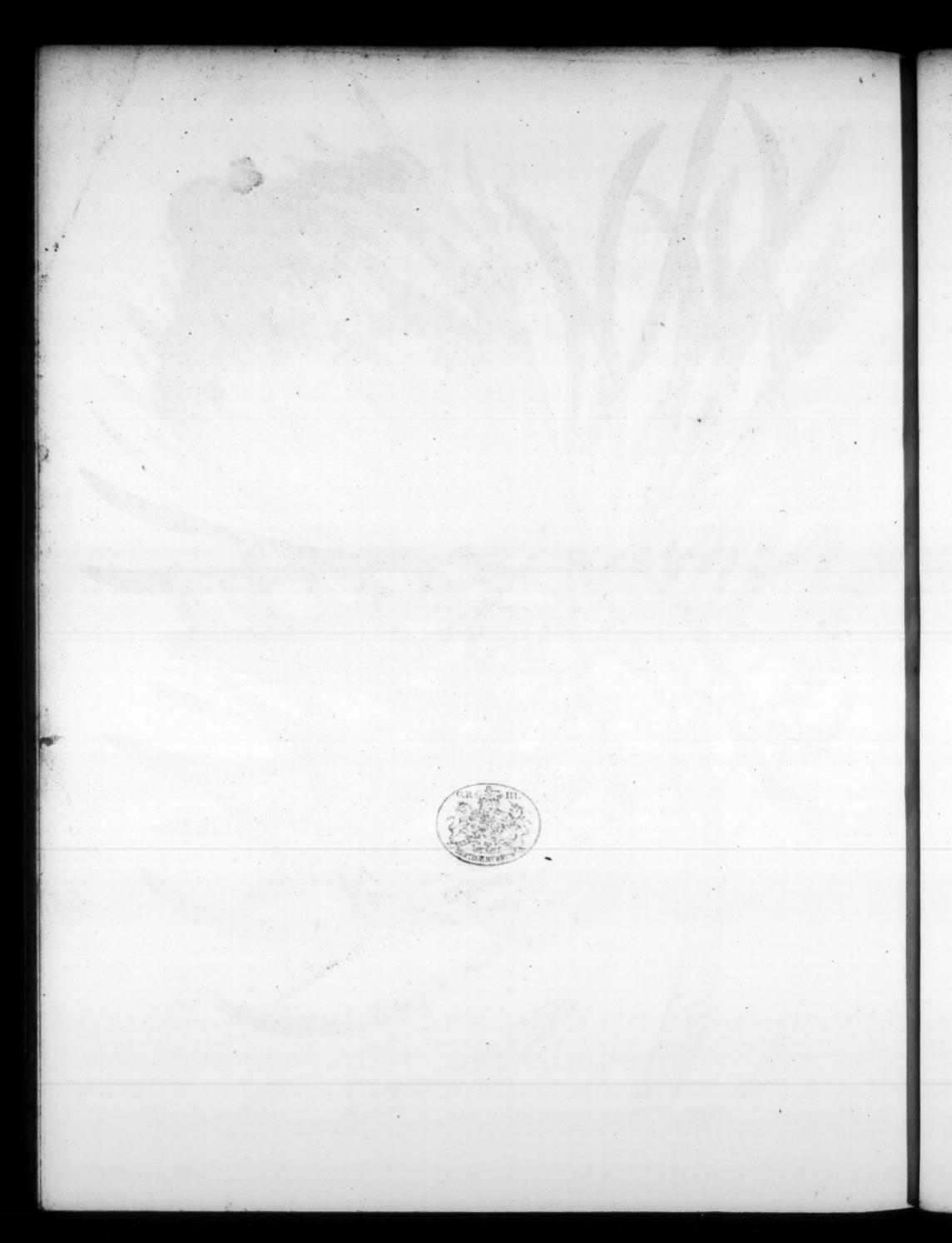
Protea with nearly linear leaves, narrow, oblique, harsh and very long; the inner scales of the cup are lance-shaped and upright; the plume of flowers are of a dark purple; the cone top-shaped.

REFERENCE TO THE PLATE.

- 1. A Bloffom complete, with the feed-bud attached.
- 2. The Petals of the flower spread open, to shew the situation of the Tips.
- 3. The Seed-bud, Shaft and Summit.

This is the third variety of Long-leaved Protea, as mentioned p. 132, and equally scarce with the preceding ones. It was raised from seed at the same time with the other two, which were received by Messrs. Lee and Kennedy, Hammersmith, from the superintendant of the Imperial Gardens at Schonbrun. This variety, at present, is in no collection, that we know of, in England, but that of G. Hibbert, Esq. where our drawing was made, in the month of January 1801. The same unfortunate character attaches to this, as to the other varieties, from the great difficulty of increasing it; although, it flourishes in growth, if planted in a light, loamy soil.





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TO THE PLANTS CONTAINED IN VOL. II.

Plate	72	Daphne pontica	Pontic Sourge Laurel	Har.	Shrub.	March, April.
Ltate	74	Persoonia lanceolata	Lance-shape-leaved Persoonia	G. H.	Shrub.	All Summer.
	75	Phyfalis proftrata	Trailing Winter cherry	H. H.	Ann.	July, August.
	76	Protea pinifolia	Pine-leaved Protea	G. H.	Shrub.	July, August
	77	Persoonia linearis	Linear-leaved Protea	G. H.	Shrub.	August, Sept.
-	78	Ixora Pavetta	Sweet Ixora	H. H.	Shrub.	August, Sept.
	79	Crowea faligna	Willow-leaved Crowea	G. H.	Shrub.	July till Nov.
3.1	80	Buchnera fœtida	Stinking Buchnera	G. H.	Ann.	August, Sept.
	81	Sowerbia juncea	Rush-like Sowerbia	G. H.	Herb.	All Summer.
	82	Bankfia ferrata	Sawed-leaved Bankfia	G. H.	Shrub.	March, April.
	83	Morœa tricolor	Three-coloured Moræa	G. H.	Bulb.	May, June.
	84	Buchnera pedunculata	Solitary-flowered Buchnera	G. H.	Shrub.	July till Nov.
	85	Mahernia odorata	Sweet Mahernia	G. H.	Shrub.	All the year.
	86	Bignonia pandorana	Norfolk Island Trumpet Flower	G. H.	Shrub.	March till June.
4	87	Ixia aristata. Var. atro-purpurea	Ragged sheathed Ixia. Var. dark purple.	G. H.	Bulb.	May, June.
	88	Eranthemum pulchellum	Blue-flowered Erauthemum	н. н.	Shrub.	Jan. till May.
	89	Gnidia lævigata	Shining-leaved Gnidia	G. H.	Shrub.	July, August.
	90	Septas capenfis	Cape leptas	G. H.	Herb.	May till August.
	91	Camellia japonica, Var.flo.pl.variegato.	Double-striped Camellia	G. H.	Shrub.	August till May.
	92	Crinum spirali	Spiral-ftalked Afphodel Lily	G. H.	Bulb.	Jan. till April.
	93	After reflexus	Reflex-leaved Starwort	G. H.	Shrub.	All the year.
	94	Galaxia ovata	Oval-leaved Galaxia	G. H.	Bulb.	June, July.
	95	Amaryllis radiata	Rayed Lily Daffodil	H. H.	Bulb.	Feb. March.
	96	Punica granatum. Var. flo. albo	White Pomegranate	G. H.	Shrub.	April, May.
	97	Vaccinium formofum	Red-twigged Whortle-berry	Har.	Shrub.	May, June.
	98	Pultenæa daphnoides	Daphne-like Pultenæa	G. H.	Shrub.	May, June.
	-	Gladiolus blandus	Large white-flowered Gladiolus	G. H.	Bulb.	May.
	99	Embothrium fericeum	Silky Embothrium	G. H.	Shrub.	All the year.
	101	Hypoxis stellata	Star-flowered Hypoxis	G. H.	Bulb.	June, July.
	102	Epigæa repens	Creeping Epigæa	Har.	Shrub.	April, May.
		Protea speciosa, nigra.	Black-flowered Protea	G.H.	Shrub.	July, August.
	103	Lachnæa Eriocephala	Woolly-headed Lachnæa	G. H.	Shrub.	March till Aug.
	101	Vaccinium crassifolium	Thick-leaved Whortle-berry	Har.	Shrub.	June, July.
	105	Houstonia coccinea	Scarlet Houstonia	G. H.	Shrub.	August till Dec.
	106	Allium gracile	Sweet-scented Garlic	H. H.	Bulb.	March till June.
	107	Geranium reniforme	Kidney-shape-leaved Geranium	G. H.	Shrub.	July, August.
		Chryfanthemum tricolor	Three-coloured Corn-Marygold	G. H.	Ann.	July till October.
	109	Protea speciosa, latifolia	Broad-leaved shewy Protea	G. H.	Shrub.	August.
	110	Gladiolus striatus.	Streaked-flowered Gladiolus	G. H.	Bulb.	July, August.
	111	Vaccinium dumofum.	Bushy Whortle-berry	Har.	Shrub.	June.
	112	Struthiola imbricata	Tiled-leaved Struthiola	G. H.	Shrub.	March and Sept.
	113	Geranium quinquevulnerum	Variegated-flowered Geranium	G. H.	Shrub.	June, July.
	114	Geranium tomentosum	Downy-leaved Geranium	G. H.	Shrub.	August.
	115	Gaultheria procumbens	Trailing Gaultheria	Har.	Shrub.	March till Aug.
	116		Purple-flowered Gentian	Har.	Herb.	July, August.
	117	Gentiana purpurea	Large-flowered Gladiolus,	G. H.	Bulb.	June.
	118	Struthiola ovata	Oval-leaved Struthiola	G. H.	Shrub.	March till June.
	119		Box Thorn-like Fuchfia	G. H.	Shrub.	
	120	Fuchfia lycioides	Cortusa-leaved Geranium.	G. H.	Shrub.	July.
	121	Gladiolus galeatus	Helmet-flowered Gladiolus	G. H.	Bulb.	May, June.
	122	Gladiolus galeatus.	Twining Thunbergia	Н. Н.	Shrub.	
	123	Thunbergia fragrans.		Н. Н.	Shrub.	
	124	Heliconia pfittacorum	Parrot billed Heliconia	Har.	Shrub.	1
	125	Vaccinium parviflorum		G. H.	Shrub.	
	126	Hibbertia volubilis	Twining Hibbertia	G. H.	Shrub.	May till Sept. July till Nov.
	127	Jasminum gracile	Slender-stemmed Jasmine.		Bulb.	
	128	Ixia polyftachia	Many-fpiked Ixia	G. H. H. H.	Bulb.	April.
	129	Gloriofa fuperba	Superb Gloriofa			August.
	130	Cerbera undulata	Waved-leaved Cerbera	Н. Н.	Shrub.	July.
	131	Geranium laciniatum	Ragged-leaved Geranium	G. H.	Shrub.	May, June.
	132	Protea longifolia. Nigra	Long-leaved Protea. Black flower	G. H.	Shrub.	
	133	Protea longifolia. Ferruginoso-purpurea.	Long-leavedProtea Rusty purple flower.	G. H.	Shrub.	July, August.
	134	Ixia crocata. Var. nigra maculata	Crocus-flowered Ixia. Var. black spotted.	G. H.	Bulb.	May, June.
	135	Malva reflexa	Reflex-flowered Mallow	G. H.	Shrub.	March till Nov.
	136	Geranium craffifolium	Thick-leaved Geranium	G. H.	Ann.	August, Sept.
	137	Gladiolus nanus	Dwarf Gladiolus	G. H.	Bulb.	May, June.
	138	Vaccinium amænum	Broad-leaved Whortle-berry	Har.	Shrub.	June, July.
	139	Struthiola ciliata. Var. flore rubro	Fringed-leaved Struthiola. Var. red-			
	3,		flowered	G. H.	Shrub.	_ 0
	140	Vaccinium frondosum	Obtuse-leaved Whortle-berry	Har.	Shrub.	2 2
	141	Cyanella capenfis	Cape Cyanella	G. H.	Bulb.	May, June.
	142	Gladiolus crispus	Curled leaved Gladiolus	G. H.		June, July.
	143	Limonia trifoliata	Three-leafletted Limonia	H. H.		
	144	Protea longifolia. Var. cono turbinato	Long-leaved Protea. Var.cone top-shaped	G.H.	Shrub.	
	1.1					

TO THE PLANTS CONTAINED IN VOL

Supply dated to the supply Plate 73, Sp. Ch. pedunculus, lege, pedunculis.
74, Gen. Ch. Nectariæ, lege, Nectaria.
76, See P. speciosa, read, formosa.

79, Gen. Ch. Pointal, for Seed-buds, read, Seed-bud.
81, Gen. Ch. Chives, for bear two chives, each parted, read, bear two tips each, parted, &c.

84, Descr. line 7, for plotted, read, potted.

90, Gen. Ch. Pericarp. Capsula, lege, Capsula.
91, English name, for Double-striped, read, Double Striped. Class, lege, Monadelphia.

96, Seed-vessel, for five-celled, read, nine celled.

106, Descr. line 5, for Hememeris, read, Hemimeris.

120, Gen. Ch. Calyx, monophyllum. Infundibuliforme, lege, morophyllum, infundibuliforme. Post superum, adde (,)

130, Descr. line penult, for O borbonica, read, O. borbonica.
131, Class, Monodelphia, lege, Monadelphia. From a fingular oversight, in transcribing, this Erratum has been overlooked, and continued, with every Geranium.

233, Sp. Ch. line 3, post lanceolatis, adde, (,)

137, Sp. Ch. line 5, for three valved, read, three-valved. Descrip. line 4, after but, put (,)



